SHARP

MODEL

LC-42BX5X

LCD COLOUR TELEVISION

OPERATION MANUAL

AQUOS

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

LC-42BX5X

LCD COLOUR TELEVISION

OPERATION MANUAL

Dear SHARP customer

Thank you for your purchase of the SHARP LCD colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Precautions carefully before using this product.

Contents

Dear SHARP customer 1
Contents 1
Trademarks 2
Important Safety Precautions 3
Supplied accessories 4
Preparation 5
Inserting the batteries 5
Using the remote control unit 5
Cautions regarding remote control unit 5
Setting the TV 6
Protection against overturning 7
Basic connection 8
Connecting to an antenna 8
Connecting to the AC outlet 8
Setting the TV on the wall 9
Removing the stand 9
Part names 10
TV (Front) 10
TV (Rear) 11
Remote control unit 12
Watching TV 13
Turning on the power 13
Turning off the power 13
Simple button operations for changing channels 13
Using Flashback (⮌) on the remote control unit 14
Using MPX on the remote control unit 14
Simple button operation for changing volume/sound 15
Sleep timer 15
Still image 15
Basic adjustment settings 16
Menu operation buttons 16
On-Screen Display 16
TV/AV input mode menu items 17
PC input mode menu items 17
Auto installation 18
Programme setup 18
Auto search 18
Manual setting for each channel 19
Search tuning 19
Fine tuning 19
Colour system 19
Sound system (Broadcasting system) 20
Skipping channels 20
Sort 20
Label 21
Erase Programme 21
AV mode selection 22
OPC (Optical Picture Control) setting 22
Picture adjustments 23
Advanced 24
C.M.S. (Colour Management System) 24
Colour temperature 24
3D-Y/C 24
Film mode 25
I/P setting 25
AV mode selection 26
Audio adjustment 26
Surround 26

Contents

Useful adjustment settings..... 27
- Password setting for child lock (for TV input mode)..... 27
- Input Label..... 28
- Image position..... 28
- Wide Screen Signalling (WSS)..... 29
- Picture aspect ratio..... 29
- WIDE mode (for TV/AV input mode)..... 30
- WIDE mode (for PC input mode)..... 31
- Language setting for on-screen display..... 32
- Audio Only..... 33
- DNR (Digital Noise Reduction)..... 33
- Input Select..... 33
- Blue Screen..... 34
- Colour system setting..... 34
- Power Control..... 35
- HDMI Setup..... 36
- PC Setup..... 36
  - Input Signal (PC input mode only)..... 36
  - Auto Sync adjustment (PC input mode only)..... 37
  - Fine Sync. adjustment (PC input mode only)..... 37

Useful features..... 38
- Dual screen functions..... 38
- Teletext language setting..... 39
- Teletext function..... 40

Using external equipment..... 42
- Displaying an external equipment image..... 42
- Displaying a DVD image (Example)..... 42
- Connecting a VCR..... 42
- Connecting a DVD player..... 43
- Connecting a game console or camcorder..... 43
- Connecting an HDTV tuner..... 44
- Viewing an image from a PC..... 45
  - Connecting a PC..... 45
  - Displaying an image from a PC..... 45

Appendix..... 46
- Troubleshooting..... 46
- PC compatibility chart..... 46
- RS-232C port specifications..... 47
- Specifications..... 49
- Optional accessories..... 49

Dimensional drawings..... 50

Trademarks

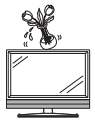
- "HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC."

Important Safety Precautions

- Cleaning — Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.

- Water and moisture — Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.

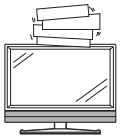
- Do not place vases or any other water-filled containers on this product.
  The water may spill onto the product causing fire or electric shock.



- Stand — Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.

- When relocating the product placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.

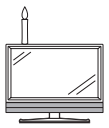
- Ventilation — The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.



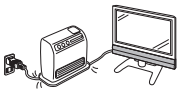
- The LCD panel used in this product is made of glass. Therefore, it can break when the product is struck forcefully or with a sharp object. If the LCD panel is broken, be careful not to be injured by broken glass.

- Heat sources — Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).

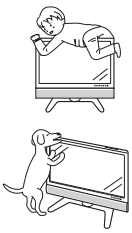
- To prevent fire, never place any type of candle or naked flames on the top or near the TV set.



- To prevent fire or shock hazard, do not place the AC power cord under the TV set or other heavy items.



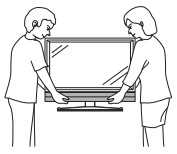
- Do not place heavy objects on this product or stand on it. Doing so could cause injury if the product overturns. Take special care near children and pets.



The LCD panel is a very high technology product with 3,147,264 thin film transistors, giving you fine picture details.
Due to the very large number of pixels, occasionally a few non-active pixels may appear on the screen as a fixed point of blue, green or red.
This is within product specifications and does not constitute a fault.

Precautions when transporting the TV

Be sure to always carry the TV by two people holding it with two hands — one hand on each side of the TV.

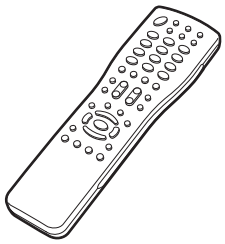
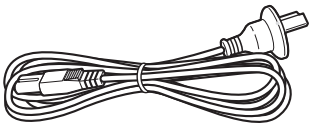
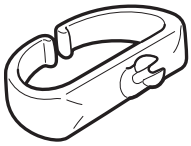
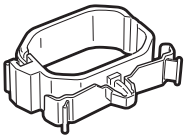


- Do not display a still picture for a long time, as this could cause an afterimage to remain.

- Install the product on the place where the AC cord can be unplugged easily from the AC outlet, or from the AC INPUT terminal on the rear of the product.

Supplied accessories

Make sure the following accessories are provided with the product.

Remote control unit	“AAA” size battery (×2)	AC cord
		
Page 12	Page 5	Page 6
Cable clamp	**Cable clamp**	**Operation manual**
		
Page 6	Page 6	

Safety restraints

Restraining band | Screw for band | Clamps | Screws for clamps

Page 7

NOTE

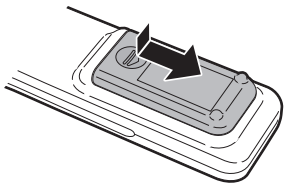
- Always use the AC cord supplied with the TV.
- The illustrations and on-screen displays in this operation manual are for explanation purposes and may vary slightly from the actual operations.

Preparation

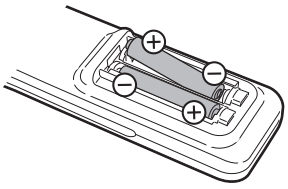
Inserting the batteries

Before using the TV for the first time, insert two “AAA” size batteries (supplied). When the batteries become depleted and the remote control fails to operate, replace the batteries with new “AAA” size batteries.

1 Open the battery cover.

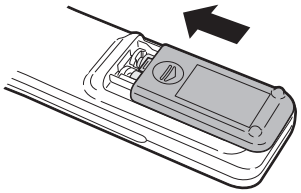


2 Insert two supplied “AAA” size batteries.



- Place batteries with their terminals corresponding to the (+) and (–) indications in the battery compartment.

3 Close the battery cover.



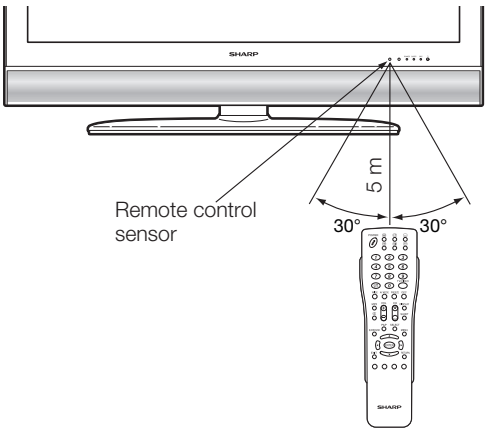
CAUTION

Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they have worn out. Chemicals that leak from batteries can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control unit for an extended period of time, remove the batteries from it.

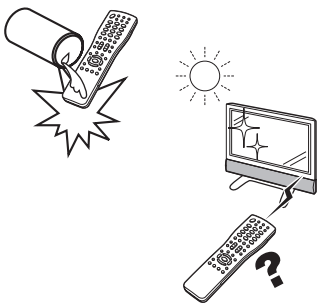
Using the remote control unit

Use the remote control unit by pointing it towards the remote sensor window.
Objects between the remote control unit and sensor window may prevent proper operation.



Cautions regarding remote control unit

- Do not subject the remote control unit to shock.
  In addition, do not soak the remote control unit with liquids, or place it in an area with high humidity.
- Do not install or place the remote control unit under direct sunlight.
  The heat may cause deformation of the unit.
- The remote control unit may not work properly if the remote sensor window of the TV is under direct sunlight or strong lighting. In such case, change the angle of the lighting or TV, or operate the remote control unit closer to the remote sensor window.



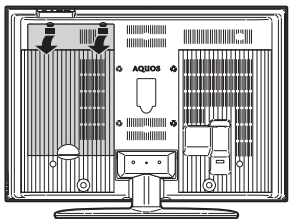
Setting the TV

Notes on installing the TV

- Avoid direct sunlight and place the TV in a well-ventilated location.
- Place the TV in a level location.

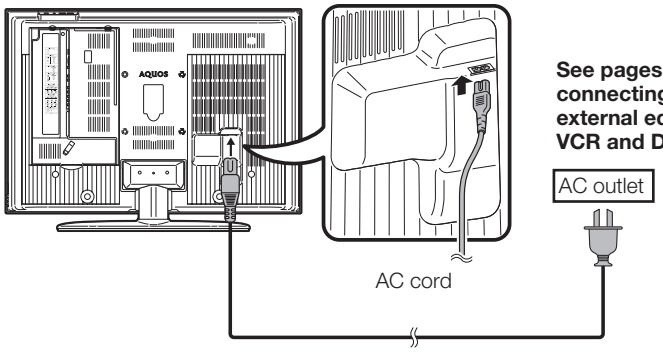
1 Removing the terminal cover

TV (rear view)



Press down the hooks to remove the cover toward you.

2 Connecting the AC cord, antenna, and external equipment to the TV

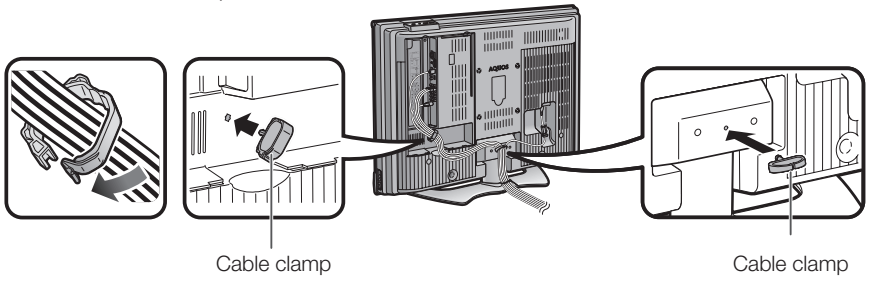


See pages 8 and 42—45 for connecting antennas and external equipment, such as VCR and DVD player.

- Place the TV close to the AC outlet, and keep the power plug within reach.

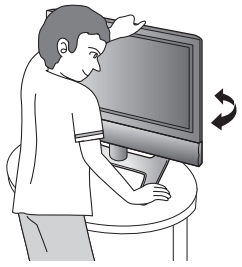
3 Bundling the cables and closing the terminal cover

Insert the cable clamp in the hole on the TV as shown.



CAUTION

- **TO PREVENT RISK OF ELECTRIC SHOCK, DO NOT TOUCH UN-INSULATED PARTS OF ANY CABLES WITH THE AC CORD CONNECTED.**



CAUTION

Adjust the screen with both hands. Put one hand on the TV and rotate the screen while steadying the stand with your other hand.

The TV can be rotated up to 10 degrees to the right or left.

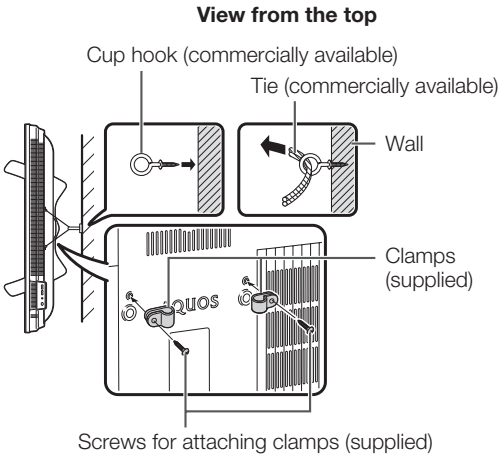
Protection against overturning

There is a danger of the product overturning in the case of a disaster or sudden collision. Carry out the following tip-resistant measurement for your safety.

Anchoring the TV to the wall or a pillar

1 Fix the product with the 2 clamps (supplied), using the screws (supplied).

2 Fix the TV to the wall using extra strong ties (commercially available).



Fixing the TV to the table

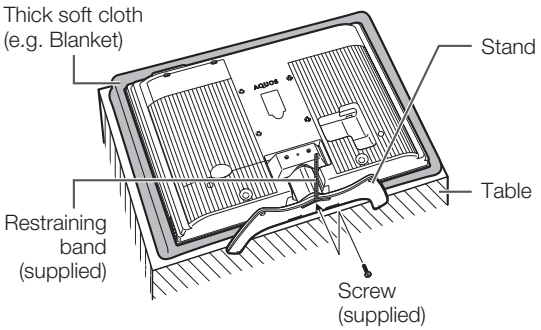
1 Lay the TV down on cushioning (such as a blanket) over a table.

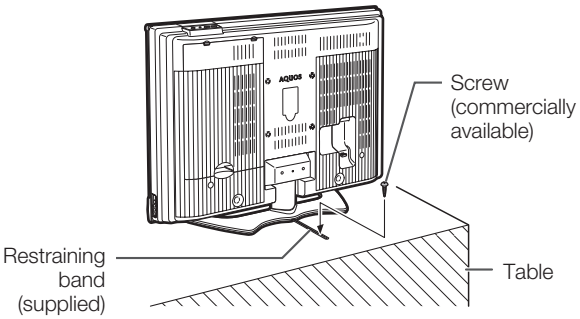
2 Attach the band (supplied) to the bottom of the stand using the screw (supplied).

3 Transfer the product to the table where you intend to fix the TV.

4 Fix the TV to the table by the band with a screw (commercially available).

- Use a screw (commercially available) whose shape is compatible with the band.





CAUTION

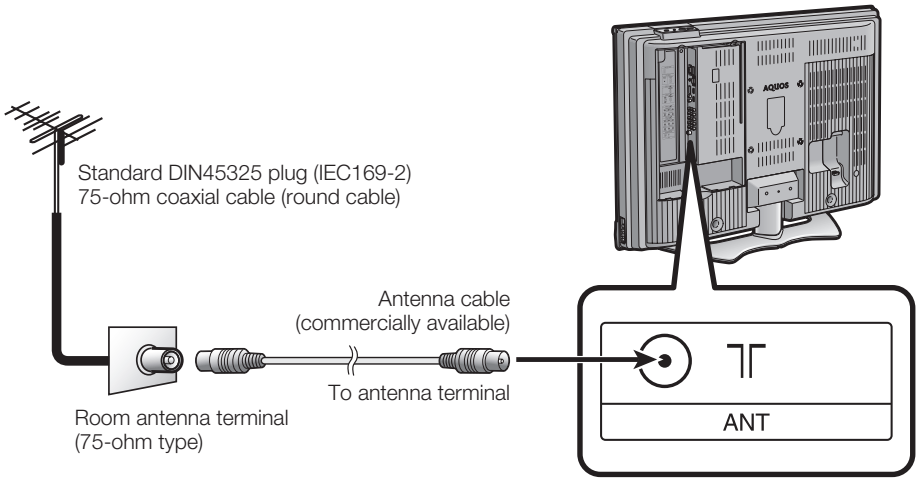
- **As this product is heavy, use a table that is wide enough to support the product and capable of withstanding the product's weight. The table should be set where it will not be overturned.**

Simple operations for watching a TV programme

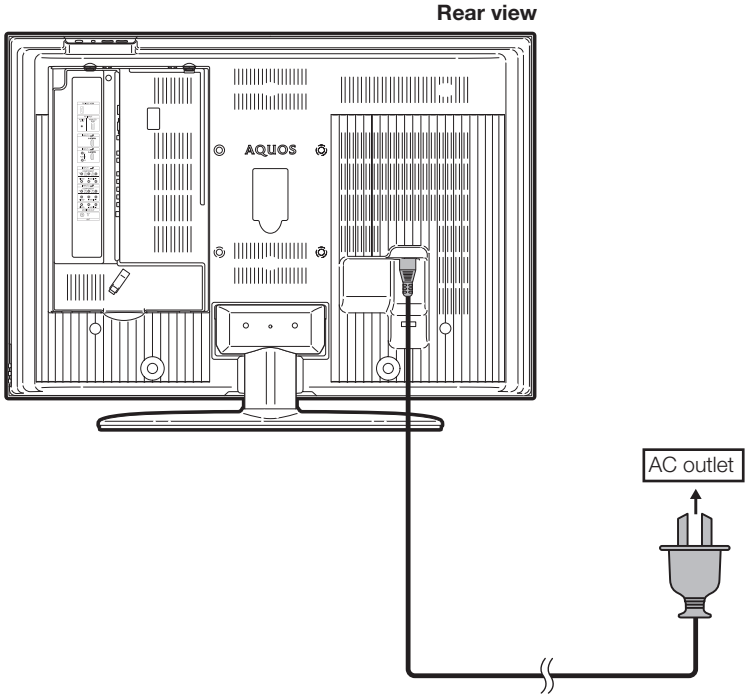
Basic connection

Connecting to an antenna

To enjoy a clearer picture, use an outdoor antenna. The following is a brief explanation of the types of connections that are used for coaxial cable.



Connecting to the AC outlet



NOTE

- Always turn off the power of the TV when connecting the AC cord.
- Disconnect the AC cord from the AC outlet if the TV will not be used for a long period of time.

Setting the TV on the wall

- You can mount the TV on the wall, using the optional AN-37AG2/AN-52AG1 bracket.
- For details, refer to the instructions supplied with the optional bracket.

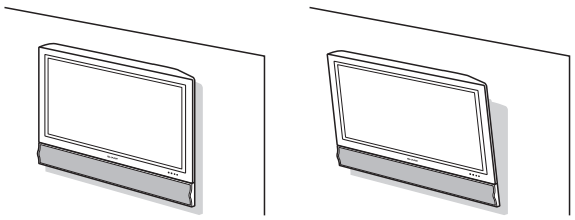
CAUTION

- **This TV should be mounted on the wall only with the AN-37AG2/AN-52AG1 (SHARP) wall mount bracket. The use of other wall mount brackets may result in an unstable installation and may cause serious injuries.**
- **Installing the Liquid Crystal Television requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.**

<Example>

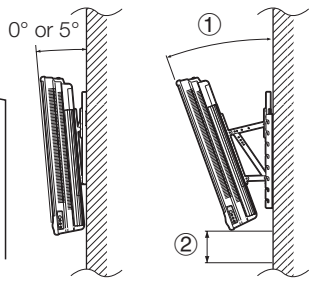
Hanging on the wall

AN-37AG2/AN-52AG1 wall mount bracket.
(See the bracket instructions for details.)



Vertical mounting　　Angular mounting

About setting the TV angle and height adjustment



AN-37AG2　　**AN-52AG1**

For AN-52AG1

① 0°/5°/10°/15°/20°
② -5/0/+5 cm (can be moved 5 cm up or down)

Removing the stand

For wall mounting with the optional bracket, remove the stand.

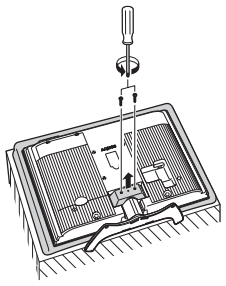
Before attaching/detaching stand

- Before detaching (or attaching) stand, unplug the AC cord from the AC outlet.
- Remove all terminal covers and connected cables.
- Lay the TV down on cushioning (such as a blanket) over a table.
- Make sure two or more people perform the operation.

CAUTION

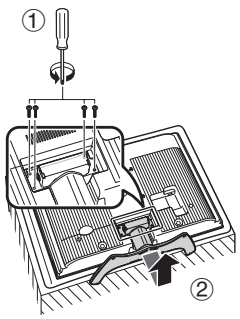
- **Do not remove the stand from the TV unless using an optional bracket to mount it.**

1



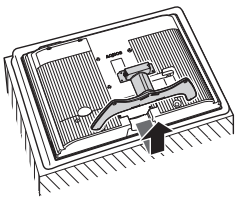
Unfasten the two screws used to secure the cover in place.

2



① Unfasten the four screws used to secure the stand in place.
② Pull the stand several centimetres toward you.

3



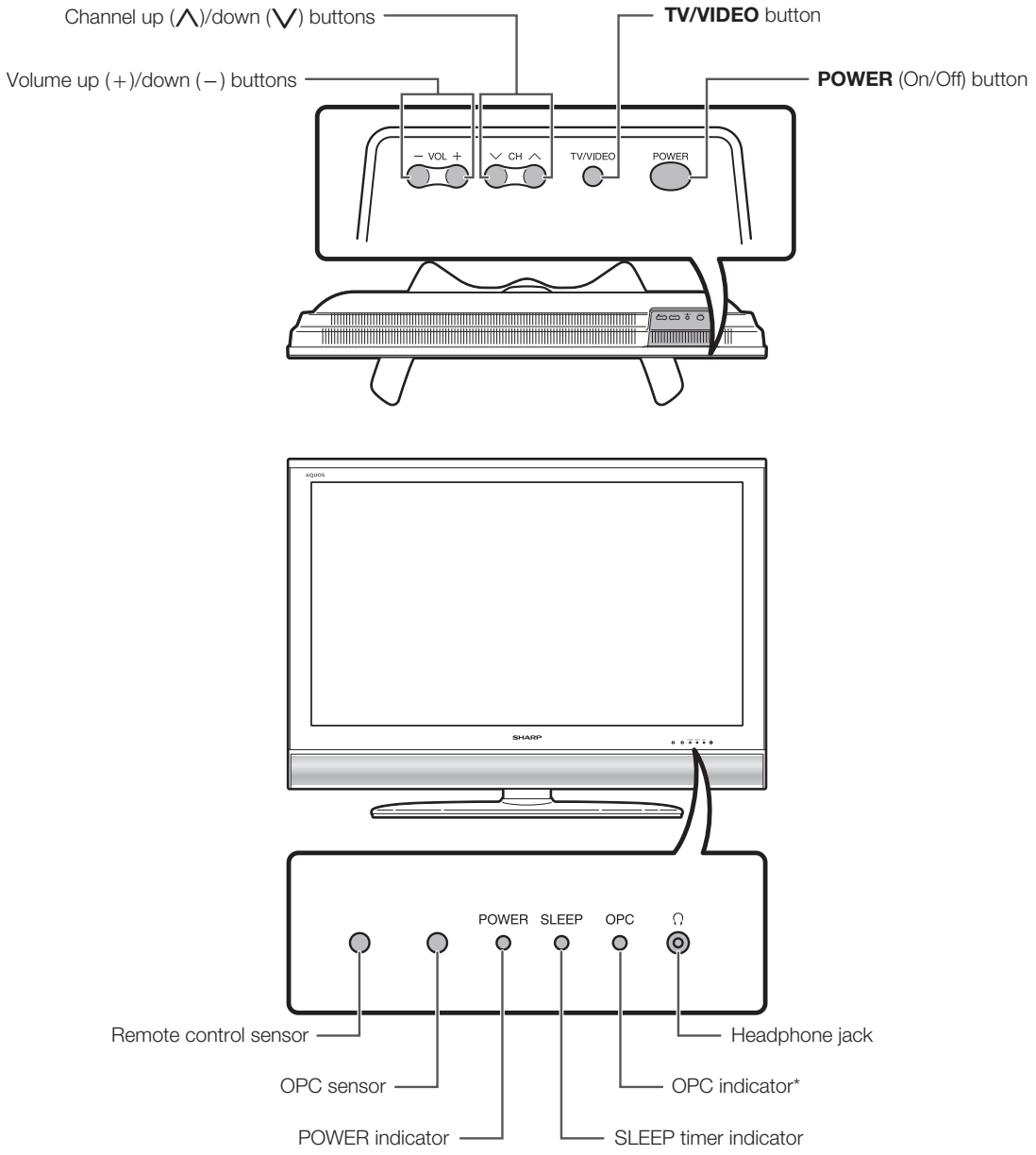
Detach the stand from the TV. (Hold the stand so it will not drop from the edge of the base area.)

NOTE

- To attach the stand, perform the above steps in reverse order.

Part names

TV (Front)



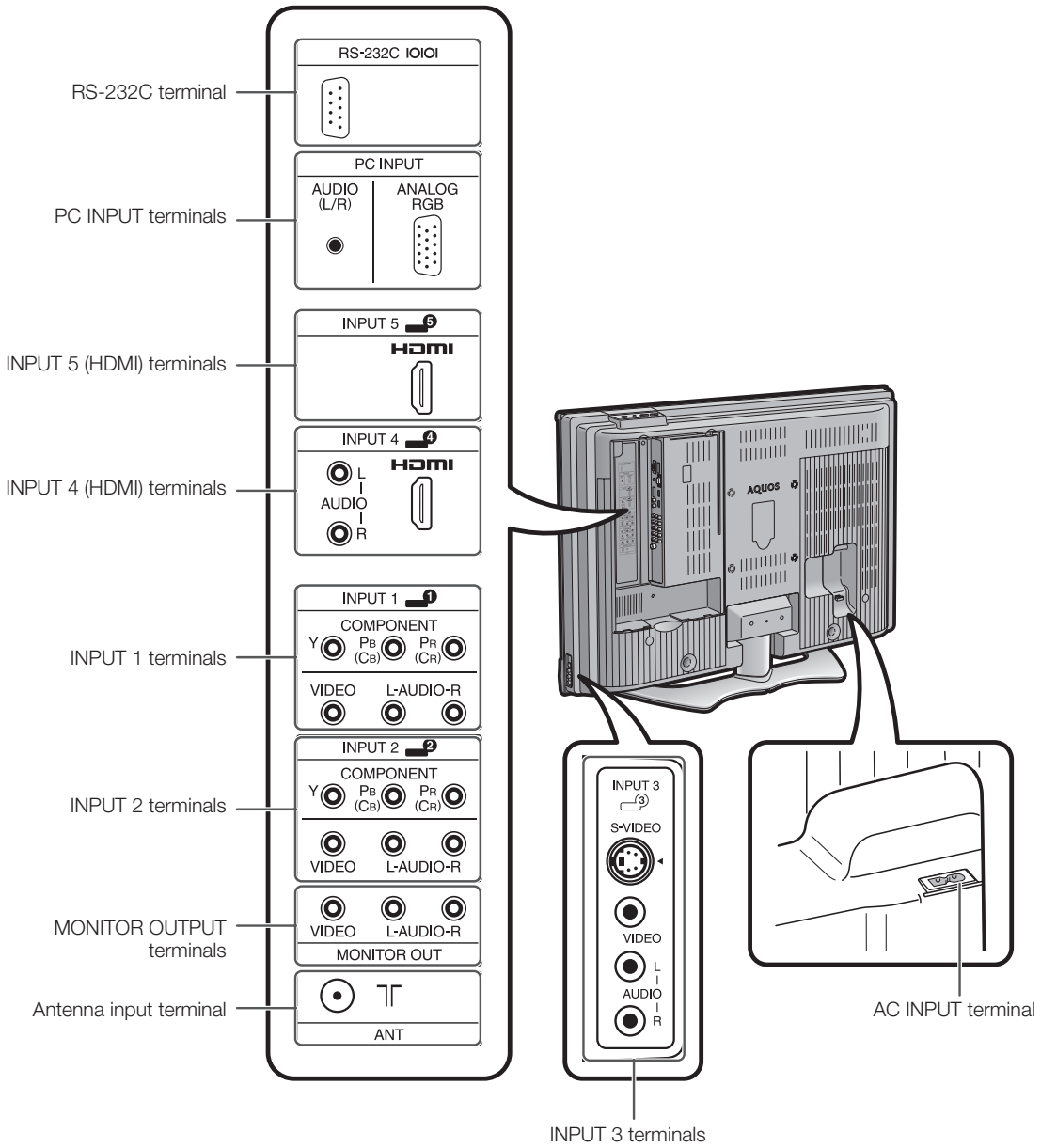
*OPC: Optical Picture Control
(See page 22.)

Regarding the headphone jack

- Use headphones with a stereo mini plug (Ø 3.5 mm).
- Be sure to unplug headphones from the jack when they are not in use.
- The speakers do not output volume when headphones are plugged in.
- Audio adjustments (page 26) do not affect the audio of connected headphones.
- You can set the volume to different levels for each input source.

Volume display when headphones are plugged in

TV (Rear)


RS-232C terminal
PC INPUT terminals
INPUT 5 (HDMI) terminals
INPUT 4 (HDMI) terminals
INPUT 1 terminals
INPUT 2 terminals
MONITOR OUTPUT terminals
Antenna input terminal
RS-232C
PC INPUT
AUDIO (L/R)
ANALOG RGB
INPUT 5
INPUT 4
L
AUDIO
R
INPUT 1
COMPONENT
Y
PB (CB)
PR (CR)
VIDEO
L-AUDIO-R
INPUT 2
COMPONENT
VIDEO
L-AUDIO-R
VIDEO
L-AUDIO-R
MONITOR OUT
ANT
AQUOS
INPUT 3
S-VIDEO
VIDEO
L
AUDIO
R
INPUT 3 terminals
AC INPUT terminal

Remote control unit

(TELETEXT)
Select the TELETEXT mode. (all TV image, all TEXT image, TV/TEXT image) (See pages 40 and 41.)

POWER (STANDBY/ON)
To switch the power on and off. (See page 13.)

(Hold)
TELETEXT mode: Stop updating Teletext pages automatically. Press again to release the hold mode. (See page 40.)

0 — 9
Set the channel. (See page 13.)
TELETEXT mode: Set the page. (See page 40.)

(Flashback)
Press to return to the previous image in normal viewing mode. (See page 14.)

WIDE
Change the wide image mode. (See pages 30 and 31.)

AV MODE
Select a video setting: AV MODE (STANDARD, MOVIE, GAME, USER, DYNAMIC), PC MODE (STANDARD, USER) (See page 22.)

MPX
Select the sound multiplex mode. (See page 14.)

VOL + /VOL –
Set the volume. (See page 15.)

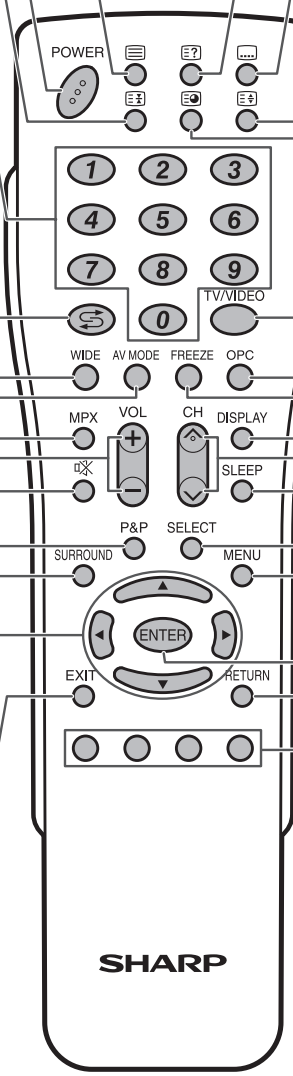
(Mute)
Mute the sound. (See page 15.)

P&P
Set the dual picture mode. Press **P&P** again to return to normal view. (See page 38.)

SURROUND
Select Surround settings. (See page 26.)

▲/▼/◀/▶ (Cursor)
Select a desired item on the setting screen. (See page 16.)

EXIT
Return to the default screen.



(Reveal hidden for TELETEXT)
TELETEXT mode: Display hidden characters. (See page 40.)

(SUBTITLE for TELETEXT)
To turn the subtitles on and off. (See page 41.)

(Top/Bottom/Full)
TELETEXT mode: Set the area of magnification. (See page 40.)

(Subpage)
Display the Teletext subpage directly. (See page 41.)

TV/VIDEO (INPUT SOURCE)
Select an input source. (TV, INPUT 1, INPUT 2, INPUT 3, INPUT 4, INPUT 5, PC) (See pages 33, 42 and 45.)

OPC
To switch Optical Picture Control on and off. (See pages 22.)

FREEZE
Freeze a motion picture on the screen. (See pages 15 and 38.)

DISPLAY
Display the programme information.

CH∧/CH∨
TV input mode: Select the channel. (See page 13.)
TELETEXT mode: Select the page. (See page 40.)

SLEEP
Set the Sleep timer. (See page 15.)

SELECT
To select either screen to be active in Dual screen mode.

MENU
Display the menu screen. (See page 16.)

ENTER
Execute a command.

RETURN
MENU mode: Return to the previous menu screen. (See page 16.)

Colour (Red/Green/Yellow/Blue)
TELETEXT mode: Select a page. (See page 40.)

NOTE

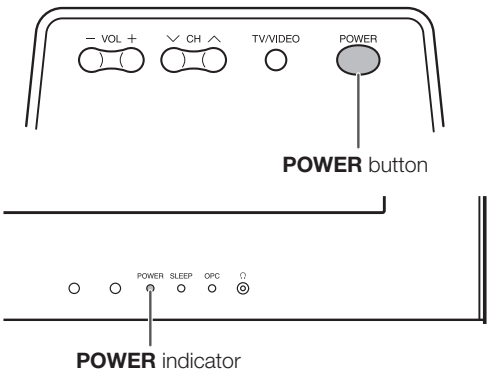
• When using the remote control unit, point it at the TV.

Watching TV

Turning on the power

Press **POWER** on the TV.
- POWER indicator (Green): The TV is on. (After a few seconds, an image appears with sound.)

- After turning the power “ON” by pressing **POWER** on the TV, you can turn the power ON/OFF by pressing **POWER** on the remote control.



Turning off the power

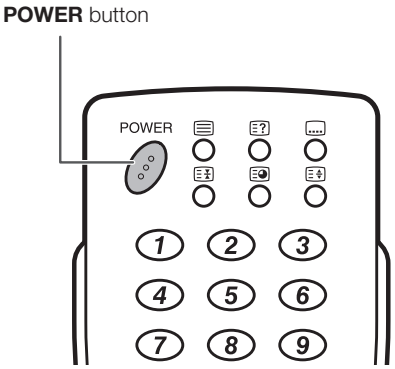
Press **POWER** on the remote control.
- The TV enters standby mode and the image on the screen disappears.
- The POWER indicator on the TV changes from green to red.

Press **POWER** on the TV.
- The POWER indicator on the TV turns off.
- When the TV is turned off by **POWER** on the TV, you cannot turn on the power by pressing **POWER** on the remote control.

POWER indicator

Off	Power off
Red	The TV is in standby mode.
Green	The TV is on.

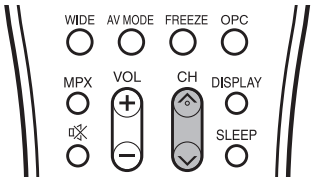
NOTE
- If you are not going to use this TV for a long period of time, be sure to remove the AC cord from the AC outlet.
- Minor power is consumed when the unit is in standby mode.



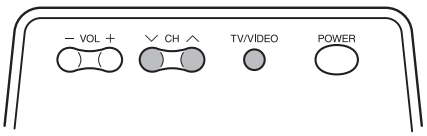
Simple button operations for changing channels

You can change channels in several ways.

Using CH∧/∨ on the remote control unit
- Press **CH∧** to increase the channel number.
- Press **CH∨** to decrease the channel number.

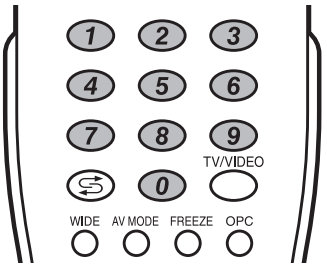


NOTE
- **CH∧/∨** on the TV operates the same as **CH∧/∨** on the remote control unit.



Using 0 — 9 on the remote control unit

Select the channels directly by pressing buttons **0** to **9**.



EXAMPLE

To select a 1-digit channel (e.g. channel 2):
- Press **0**, followed by **2**.

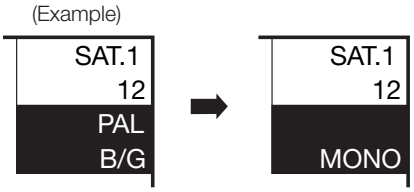
To select a 2-digit channel (e.g. channel 12):
- Press **1**, followed by **2**.

When viewing Teletext information

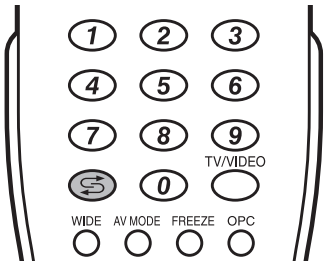
View a page directly which is 3-digit page number from 100 to 899 by pressing buttons **0** to **9**.

Channel display

Channel display changes approximately after 3 seconds as shown below.



Using Flashback (⇆) on the remote control unit

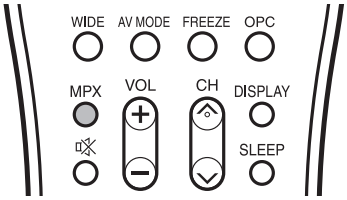


Press ⇆ to switch the currently tuned channel to the previously tuned channel.
Press ⇆ again to switch back to the currently tuned channel.

Press ⇆ to toggle between the currently selected input source and the previously selected one.

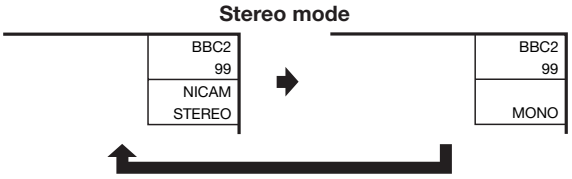
Press ⇆ to return to the previous page in TELETEXT mode.

Using MPX on the remote control unit

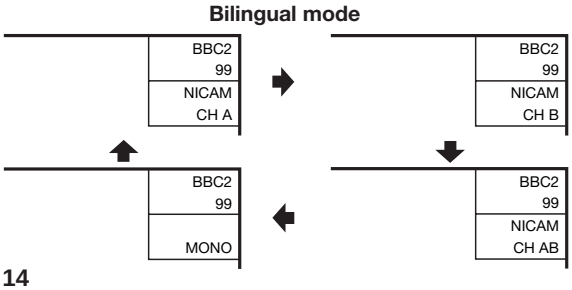


In the NICAM TV broadcasts

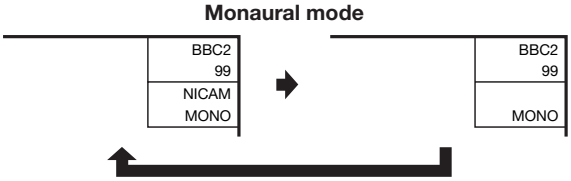
When receiving a stereo signal
Each time you press **MPX**, the mode switches between NICAM STEREO and MONO.



When receiving a bilingual signal
Each time you press **MPX**, the mode switches among NICAM CH A, NICAM CH B, NICAM CH AB and MONO.

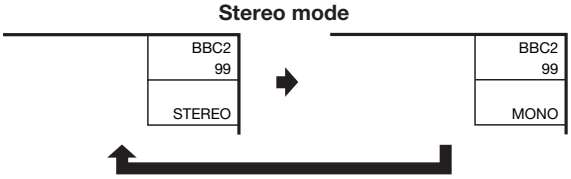


When receiving a monaural signal
Each time you press **MPX**, the mode switches between NICAM MONO and MONO.

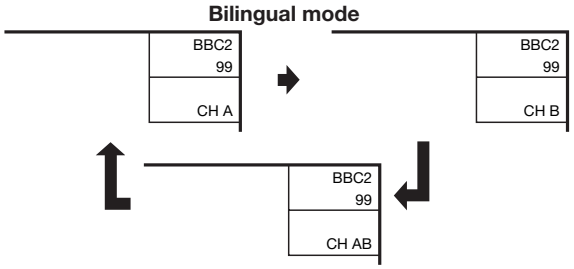


In the TV mode of A2 TV broadcasts

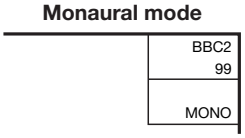
When receiving a stereo signal
Each time you press **MPX**, the mode switches between STEREO and MONO.



When receiving a bilingual signal
Each time you press **MPX**, the mode switches among CH A, CH B and CH AB.



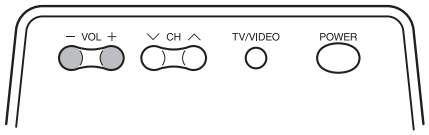
When receiving a monaural signal
When you press **MPX**, “MONO” displays.

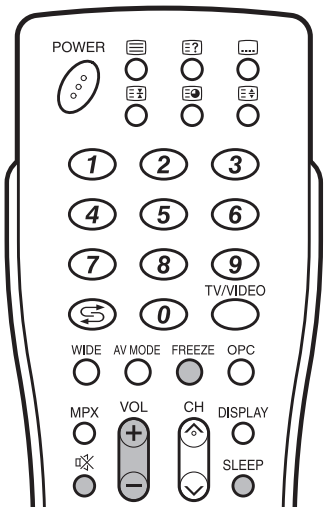


NOTE

- “BBC2” and “99” are tentative network name and channel.

Simple button operation for changing volume/sound





Changing the volume

You can change the volume on the TV or on the remote control unit.

- To increase the volume, press **VOL +**.
- To decrease the volume, press **VOL –**.

NOTE

- "TV", "INPUT1", "INPUT2", "INPUT3", "INPUT4", "INPUT5" and "PC" modes can store volume adjustment values separately.

Using Mute (🔇) on the remote control unit

🔇 mutes the current sound output.

1 Press 🔇.

- The sound is silenced.
- "🔇" has been displayed on the screen for 30 minutes.

Mute

NOTE

- Within 30 minutes after pressing 🔇, press one of the buttons below to cancel the mute.
  - **VOL –**/**VOL +**
  - 🔇
- **Mute will be cancelled after 30 minutes. However, the TV will not suddenly output loud sound as the volume level will be set to 0 automatically. Increase the volume level by pressing VOL +.**

2 Press 🔇 again within 30 minutes to cancel the mute.

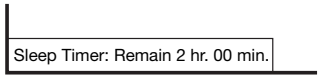
- Before 30 minutes, the volume level returns to the previous setting.

Sleep timer

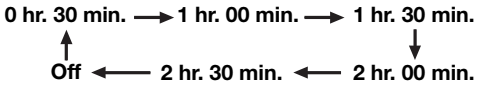
Allows you to set a time when the TV automatically switches to standby.

1 Press **SLEEP**.

- Remaining time displays when sleep timer has been set.



2 Each time you press **SLEEP**, the remaining time switches as shown below.



NOTE

- When the time has been set, countdown automatically starts.
- Five minutes before the preset of time expires, the remaining time displays each minute.
- Select "Off" by pressing **SLEEP** to cancel the sleep timer.

Still image

You can freeze a motion picture on the screen.

1 Press **FREEZE**.

2 Press **RETURN** to exit still image.

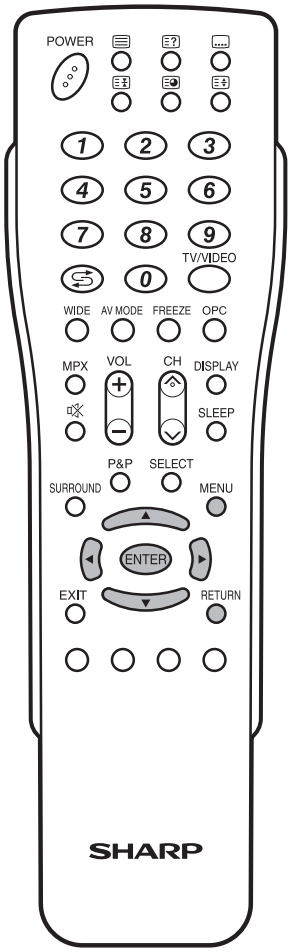
NOTE

- When this function is not available, "No still image available." will display.
- The still image automatically goes out after 30 minutes.

Basic adjustment settings

Menu operation buttons

Use the following buttons on the remote control to operate the menu.

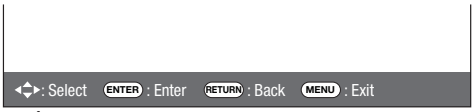


MENU: Press to open or close the menu screen.

▲/▼/◀/▶: Press to select a desired item on the screen or adjust a selected item.

ENTER: Press to go to the next step or complete the setting.

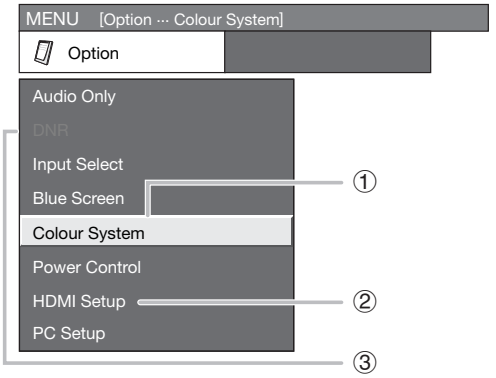
RETURN: Press to return to the previous step.



The bar above is an operational guide for the remote control.
The bar will change in accordance with each menu setting screen.

On-Screen Display

(Example)



① Item displayed in yellow
- This indicates the item currently selected.
- Press **ENTER** to go to the adjustment screen for this item.

② Item displayed in white
- This indicates an item can be selected.

③ Item displayed in grey
- This indicates that the item cannot be selected.
  * There are various reasons why items cannot be selected, but the main reasons are as follows:
  1. Nothing is connected to the selected input terminal.
  2. The function is not compatible with the current input signal.

NOTE

- The screens in the operation manual are for explanation purposes (some are enlarged, others cropped) and may vary slightly from the actual screens.

TV/AV input mode menu items

List of TV/AV menu items to help you with operations

Picture

AV Mode ..... Page 22
OPC ..... Page 22
Backlight ..... Page 23
Contrast ..... Page 23
Brightness ..... Page 23
Colour ..... Page 23
Tint ..... Page 23
Sharpness ..... Page 23
Advanced
- C. M. S. ..... Page 24
- Colour Temp. ..... Page 24
- 3D-Y/C* ..... Page 24
- Film Mode* ..... Page 25
- I/P Setting* ..... Page 25

Audio

AV Mode ..... Page 26
Treble ..... Page 26
Bass ..... Page 26
Balance ..... Page 26
Surround ..... Page 26

Setup

Auto Installation** ..... Page 18
Programme Setup** ..... Pages 18-21
Child Lock** ..... Page 27
Input Label*** ..... Page 28
Position ..... Page 28
WSS ..... Page 29
4:3 Mode ..... Page 29
Language ..... Page 32
Text Language ..... Page 39

Option

Audio Only ..... Page 33
DNR* ..... Page 33
Input Select
- Input1 ..... Page 33
- Input2 ..... Page 33
- Input3 ..... Page 33

Blue Screen ..... Page 34
Colour System ..... Page 34
Power Control
- No Signal Off ..... Page 35
- No Operation Off ..... Page 35

HDMI Setup
- Signal Type ..... Page 36
- Colour Matrix ..... Page 36
- Auto View ..... Page 36
- Audio Select ..... Page 36

PC input mode menu items

List of PC menu items to help you with operations

Picture

AV Mode ..... Page 22
OPC ..... Page 22
Backlight ..... Page 23
Contrast ..... Page 23
Brightness ..... Page 23
Advanced
- C. M. S. ..... Page 24
- Colour Temp. ..... Page 24

Audio

AV Mode ..... Page 26
Treble ..... Page 26
Bass ..... Page 26
Balance ..... Page 26
Surround ..... Page 26

Setup

Input Label ..... Page 28
Language ..... Page 32
Text Language ..... Page 39

Option

Audio Only ..... Page 33
Input Select
- Input1 ..... Page 33
- Input2 ..... Page 33
- Input3 ..... Page 33

Power Control
- No Operation Off ..... Page 35
- Power Management ..... Page 35

PC Setup
- Input Signal. ..... Page 36
- Auto Sync. ..... Page 37
- H-Position ..... Page 37
- V-Position ..... Page 37
- Clock ..... Page 37
- Phase ..... Page 37

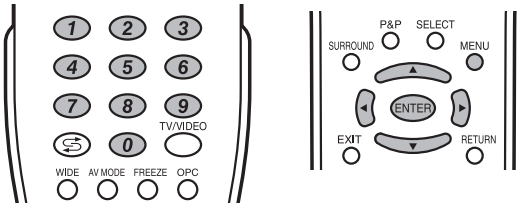
NOTE

*: Not selectable when using INPUT4 or INPUT5
**: Not selectable when using INPUT1 to INPUT5.
***: Not selectable when using TV.

- When inputting external equipment signals, “Colour System” can be set only when using INPUT1 to INPUT3.
- “Audio Select” can be set only when using INPUT4.

Auto installation

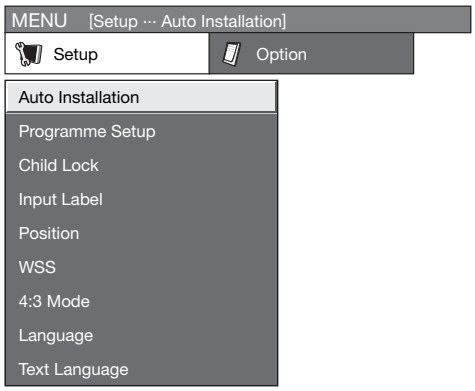
You can run auto installation again, even after setting up the preset channels.



1 Press **MENU** and the MENU screen displays.

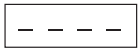
2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Auto Installation”, and then press **ENTER**.



4 If you have already set the password, enter it here.

- See page 27 for setting a password.



5 Press ▲/▼ to select “Yes”, and then press **ENTER**.

6 Press ▲/▼ to select the desired language listed on the screen, and then press **ENTER**.
Press ▲/▼ to select the desired sound system, and then press **ENTER**.
You do not need to do anything during the auto search.
“Search is completed.” is displayed. Press **MENU** to exit.

Programme setup

You can run the auto search procedure again at any time by accessing the Setup menu and Programme Setup. Channels can be tuned automatically or manually.

Auto search

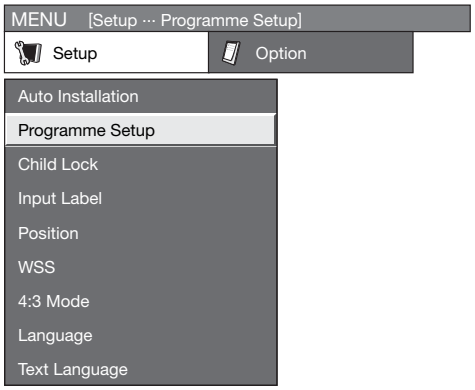
You can also automatically search by performing the procedure below. This is the same function as programme auto search in auto installation.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.
If you have already set the password, enter it here.

- See page 27 for setting a password.



4 Press ▲/▼ to select “Auto Search”, and then press **ENTER**.

5 Press ▲/▼ to select “Yes”, and then press **ENTER**.
Press ▲/▼ to select the desired sound system, and then press **ENTER**.
“Search is completed.” is displayed. Press **MENU** to exit.

Manual setting for each channel

You can set some channel items manually. They are Search, Fine (TV frequency), Colour System, Sound System, and Skip.

1 Press **MENU** and the MENU screen displays.

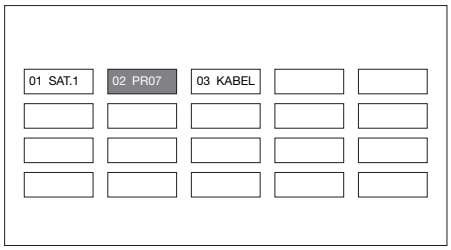
2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.
If you have already set the password, enter it here.
- See page 27 for setting a password.

4 Press ▲/▼ to select “Manual Adjust”, and then press **ENTER**.

5 Press ▲/▼ to select “Yes”, and then press **ENTER**.

Programme Setup “Manual Adjust” menu

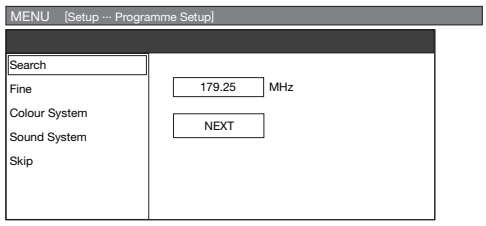


You can select one of the following settings.
① **Search** (See page 19.)
② **Fine** (See page 19.)
③ **Colour system** (See page 19.)
④ **Sound system** (See page 20.)
⑤ **Skip** (See page 20.)

Search tuning

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Search”, and then press **ENTER**.



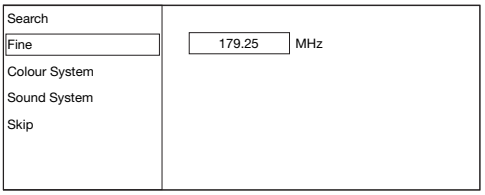
3 As **ENTER** is pressed, the next channels will be searched in order.

Fine tuning

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Fine”, and then press **ENTER**.

3 Press ◀/▶ to adjust the frequency, and then press **RETRUN** or **MENU**.
- Adjust while checking the background picture as a reference.



- Instead of the method above, you can also set by directly entering the frequency number of the channel with **0 — 9**.
- When setting a frequency on the “Fine” screen, the last figure of the frequency needs to be “0” or “5”.

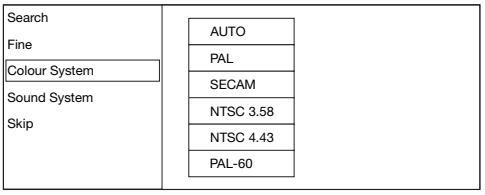
EXAMPLE
- 179.25 MHz: Press **1** → **7** → **9** → **2** → **5**.
- 49.25 MHz: Press **0** → **4** → **9** → **2** → **5**.

Colour system

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Colour System”, and then press **ENTER**.
- Receivable colour systems are listed.

Colour system menu



3 Press ▲/▼ to select the optimum colour system, and then press **ENTER**.

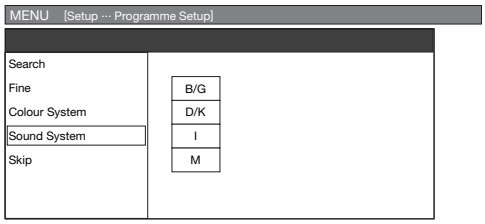
Manual setting for each channel (continued)

Sound system (Broadcasting system)

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Sound System”, and then press **ENTER**.
- Receivable sound systems (Broadcasting systems) are listed.

Sound system menu



3 Press ▲/▼ to select the optimum sound system, and then press **ENTER**.

NOTE
- Check the sound system if the sound output were not correct.

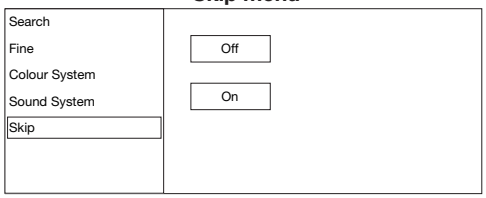
Skipping channels

Channels with “Skip” set to “On” are passed over when using **CH**∧/∨ even if selected while watching the image from the TV.

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information will be displayed.

2 Press ▲/▼ to select “Skip”, and then press **ENTER**.
- Skip menu displays.

Skip menu



3 Press ▲/▼ to set “Skip” to “On”, and then press **ENTER**.

Sort

Channel positions can be sorted freely.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.
If you already set the password, enter it here.
- See page 27 for setting a password.

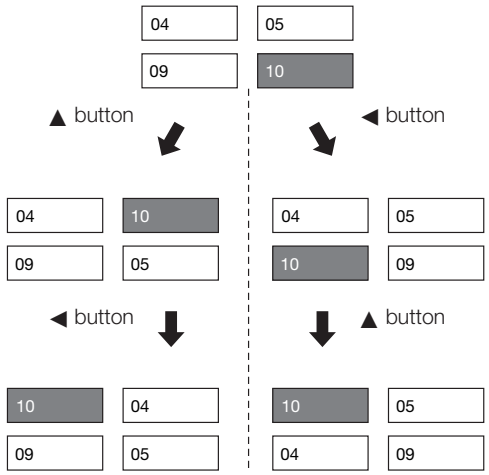
4 Press ▲/▼ to select “Sort”, and then press **ENTER**.

5 Press ▲/▼ to select “Yes”, and then press **ENTER**.

6 Press ▲/▼/◀/▶ to select the channel you want to move, and then press **ENTER**.

7 Move it to the desired position by pressing ▲/▼/◀/▶, and then press **ENTER**.
- Please be aware that the neighboring channels are switched during this procedure.

(Example)
When moving channel 10 to channel 4's position.



8 Repeat the steps 6 and 7 until all desired channels are sorted.

Label

Channels can be labelled freely.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.
If you already set the password, enter it here.
- See page 27 for setting a password.

4 Press ▲/▼ to select “Label”, and then press **ENTER**.

5 Press ▲/▼ to select “Yes”, and then press **ENTER**.

6 Press ▲/▼/◀/▶ to select the channel you want to label, and then press **ENTER**.

7 Press ▲/▼ to select characters and ◀/▶ to move to the desired digit, and then press **ENTER** to complete the label setting.

Erase Programme

The individual programme can be erased.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.
If you already set the password, enter it here.
- See page 27 for setting a password.

4 Press ▲/▼ to select “Erase Programme”, and then press **ENTER**.

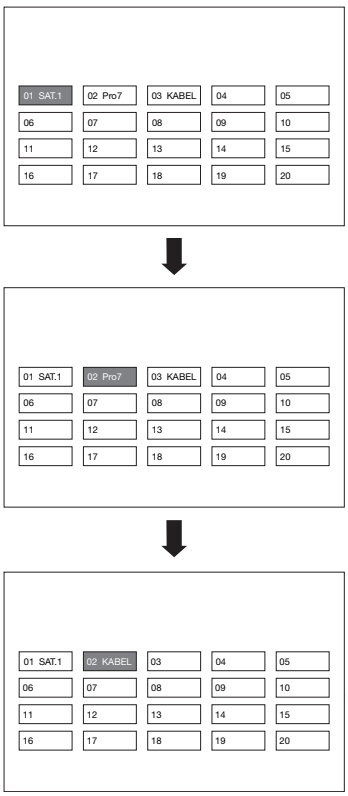
5 Press ▲/▼ to select “Yes”, and then press **ENTER**.

6 Press ▲/▼/◀/▶ to select the channel you want to erase, and then press **ENTER**.

7 Press **ENTER** to erase the channel.
All the subsequent programmes move up.

8 Repeat the steps 6 and 7 until all desired channels are erased.

Erase programme menus



AV mode selection

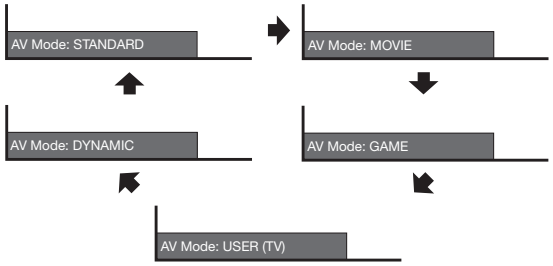
AV mode gives you five viewing options to choose from to best match the system environment, which can vary due to factors like room-brightness, type of programme watched or the type of image input from external equipment.

Using AV MODE on the remote control unit

1 Press **AV MODE**.
- Present AV mode displays.

2 Press **AV MODE** again before the mode displayed on the screen disappears.
- The mode changes as shown below.

AV input mode



PC input mode

Using AV Mode on the menu screen

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Picture”.

3 Press ▲/▼ to select “AV Mode”, and then press **ENTER**.

4 Press ▲/▼ to select the desired item, and then press **ENTER**.

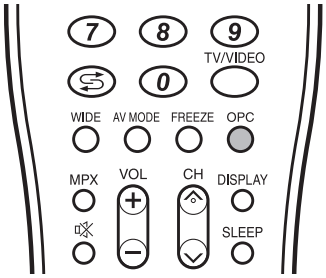
Selected item	Description
STANDARD	For a highly defined image in a normally bright room
MOVIE	For a movie
GAME	Lowers image brightness for easier viewing.
USER	Allows the user to customise settings as desired. You can set the mode for each input source.
DYNAMIC	For a clear-cut image emphasising high contrast for sports viewing

NOTE
- You can select a different AV MODE item for each input mode. (For example, select STANDARD for TV input and DYNAMIC for VIDEO input.)
- During PC input mode, only “STANDARD” and “USER” can be selected under the AV mode selection.

OPC (Optical Picture Control) setting

You can set the TV to automatically adjust the screen to suitable backlight brightness according to the lighting conditions.

Using OPC on the remote control unit



Press **OPC** to switch the OPC function on and off.

Using OPC on the menu screen

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Picture”.

3 Press ▲/▼ to select “OPC”, and then press **ENTER**.

4 Press ▲/▼ to select the desired item, and then press **ENTER**.

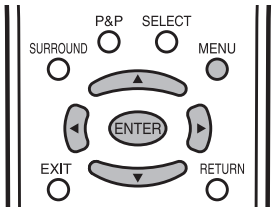
Selected item	Description
Off	The brightness is fixed at the value set in “Backlight” (See page 23).
On	Automatically adjusts
On (Display)	Displays the OPC effect on the screen while adjusting the brightness of the screen.

NOTE
- Make sure no object obstructs the OPC sensor, which could affect its ability to sense surrounding light.

Picture adjustments

You can adjust the picture to your preference.

Follow the steps to adjust the picture.



1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Picture”.

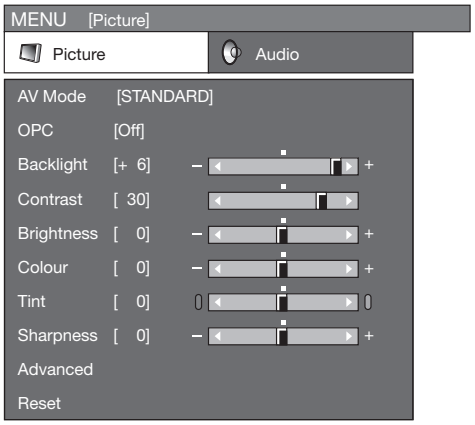
3 Press ▲/▼ to select a specific adjustment item.

4 Press ◀/▶ to adjust the item to your desired position.

NOTE

- For resetting all adjustment items to factory preset values, press ▲/▼ to select “Reset”, press **ENTER**, press ▲/▼ to select “Yes”, and then press **ENTER**.
- “Backlight” cannnot be adjusted when “OPC” is set to “On” or “On (Display)”.

Adjustments items



Selected item	◀button	▶button
Backlight	The screen dims	The screen brightens
Contrast	For less contrast	For more contrast
Brightness	For less brightness	For more brightness
Colour	For less colour intensity	For more colour intensity
Tint	Skin tones become purplish	Skin tones become greenish
Sharpness	For less sharpness	For more sharpness

NOTE

- Select “Advanced” and then press **ENTER** to set “C.M.S”, “Colour Temp.”, “3D-Y/C”, “Film Mode” or “I/P Setting”. See pages 24 and 25.

Advanced

Advanced setting enables you to set the picture adjustment in more detail. There are five options you can choose from.

C.M.S. (Colour Management System)

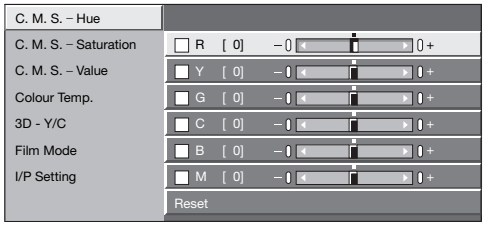
Colour tone is managed using the six-colour adjustment setting.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Picture”.

3 Press ▲/▼ to select “Advanced”, and then press **ENTER**.

4 Press ▲/▼ to select a specific adjustment item among “C.M.S.-Hue”, “C.M.S.-Saturation” and “C.M.S.-Value”, and then press **ENTER**.



5 Press ◀/▶ to adjust the item to your desired position.

NOTE

- For resetting all adjustment items to factory preset values, press ▲/▼ to select “Reset”, and then press **ENTER**.

Selected item	Description
C.M.S-Hue	This is a standard to adjust the colour either more reddish or more bluish in tone.
C.M.S-Saturation	Increases or decreases the saturation of a selected colour.
C.M.S-Value	A higher value makes the image brighter. A lower value makes the image darker.

Colour temperature

Adjusts the colour temperature to give the best white image.

1 Repeat steps 1 to 3 in **C.M.S. (Colour Management System)**.

2 Press ▲/▼ to select “Colour Temp.”, and then press **ENTER**.

3 Press ▲/▼ to select the desired level, and then press **ENTER**.

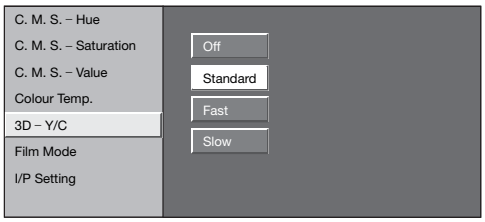
Selected item	Description
High **Mid-High** **Middle** **Mid-Low** **Low**	White with bluish tone ⬍ White with reddish tone

3D-Y/C

Provides high quality images with minimal dot crawl and cross colour noise.

1 Repeat steps 1 to 3 in **C.M.S. (Colour Management System)**.

2 Press ▲/▼ to select “3D-Y/C”, and then press **ENTER**.



3 Press ▲/▼ to select the desired level, and then press **ENTER**.

Selected item	Description
Off	3D-Y/C off
Standard	Normal adjustment
Fast	For movie image
Slow	For still image

NOTE

- “3D-Y/C” is not selectable depending on the input signal type.
- 3D-Y/C may not operate depending on the input signal type or noisy input signal.

Film mode

Automatically detects a film-based source (originally encoded at 24/25 frames/second, depending on the vertical frequency), analyses it then recreates each still film frame for high-definition picture quality.

1. Press **MENU** and the MENU screen displays.
2. Press ◀/▶ to select “Picture”.
3. Press ▲/▼ to select “Advanced”, and then press **ENTER**.
4. Press ▲/▼ to select “Film Mode”, and then press **ENTER**.
5. Press ▲/▼ to select “On”, and then press **ENTER**.

I/P setting

Adjusting the image and input signal can give you a more beautiful picture.

1. Repeat steps 1 to 3 in **Film mode**.
2. Press ▲/▼ to select “I/P Setting”, and then press **ENTER**.
3. Press ▲/▼ to select “Interlace” or “Progressive”, and then press **ENTER**.

NOTE

- The picture is progressive scan when Film Mode is “On”.

AV mode selection

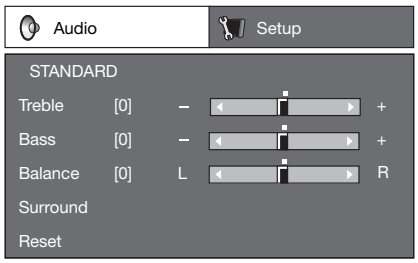
This option links to “AV Mode” in the Picture menu. (See page 22.)

Audio adjustment

For each selected AV mode, you can adjust the following three items: Treble, Bass, and Balance; to your preferred setting. After choosing the AV mode you want to adjust, next carry out audio adjustment.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Audio”.



3 Press ▲/▼ to select a specific adjustment item.

4 Press ◀/▶ to adjust the item to your desired position.

Selected item	◀button	▶button
Treble	For weaker treble	For stronger treble
Bass	For weaker bass	For stronger bass
Balance	Decrease audio from the right speaker	Decrease audio from the left speaker

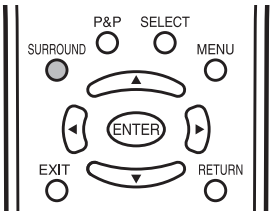
NOTE

- For resetting all adjustment items to factory preset values, press ▲/▼ to select “Reset”, press **ENTER**, press ▲/▼ to select “Yes”, and then press **ENTER**.
- When headphones are in use, “Surround” cannot be selected.
- “Surround” can be selected for each “AV Mode” setting.
- “Balance” cannot be adjusted when “Surround” is set to “On”.

Surround

When you set to On, you can enjoy surround sound, the same as if you were in a movie theatre.

Using SURROUND on the remote control unit



Press **SURROUND** to switch the Surround function on and off.

Selected item	Description
On	Makes it possible to enjoy natural, realistic surround sound.
Off	Outputs the normal sound.

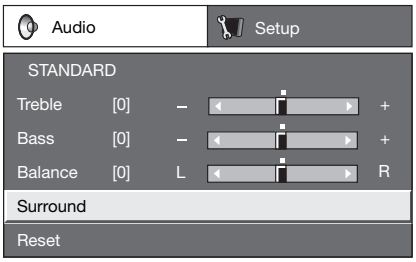
Using Surround on the menu screen

You can produce Surround effects from the “Audio” setting.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Audio”.

3 Press ▲/▼ to select “Surround”, and then press **ENTER**.



4 Press ▲/▼ to select “On”, and then press **ENTER**.

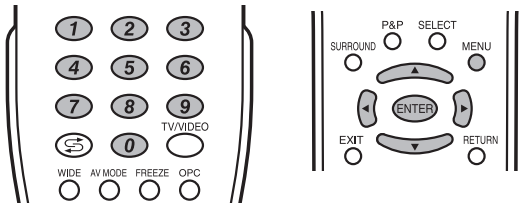
NOTE

- When headphones are in use, “Surround” cannot be selected.
- “Surround” can be selected for each “AV Mode” setting.

Useful adjustment settings

Password setting for child lock (for TV input mode)

Allows you to use a password to protect certain settings from being accidentally changed.



Setting a password

Register a 4-digit password number to use the Child Lock function.

1 Press **MENU** and the MENU screen displays.

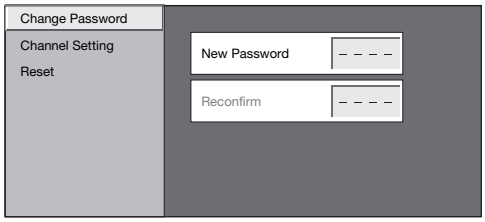
2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Child Lock”, and then press **ENTER**.

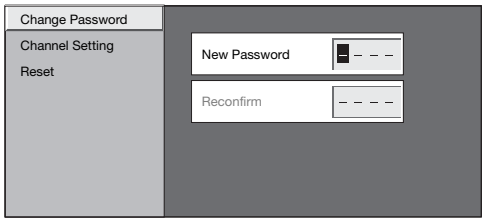
4 If you already set the password, enter it here.

– – – –

5 Press ▲/▼ to select “Change Password”, and then press **ENTER**.



6 Enter the 4-digit number as a password using **0 — 9**.



7 Enter the same 4-digit number as in step 6 to confirm.

NOTE

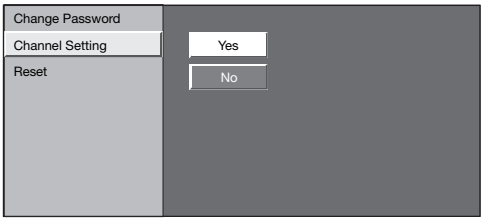
- To view a locked channel you must enter a password. When you select a locked channel, a password prompt message pops up.

Setting a channel

1 Repeat steps 1 to 4 in **Setting a password**.

2 Press ▲/▼ to select “Channel Setting”, and then press **ENTER**.

3 Press ▲/▼ to select “Yes”, and then press **ENTER**.



4 Press ▲/▼/◀/▶ to select the channel that you wish to apply the Child Lock, and then press **ENTER**.

- The Child Lock setting becomes effective only when the TV is turned off after the Child Lock is applied.

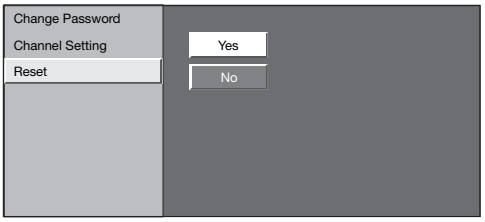
Resetting the password

Allows you to reset your password.

1 Repeat steps 1 to 4 in **Setting a password**.

2 Press ▲/▼ to select “Reset”, and then press **ENTER**.

3 Press ▲/▼ to select “Yes”, and then press **ENTER**.

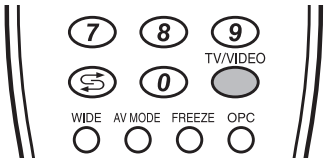


NOTE

- **As a precautionary measure, make a note of your password on the back of this operation manual, cut it out and keep it in a safe place that children cannot reach.**
- This function is only available for TV input mode.
- To relock a channel which has been temporarily unlocked by inputting the correct password, turn power off and then on again.
- When no password is input for 20 seconds after the prompt message is displayed, the TV goes into standby mode.

Input Label

You can assign each input source a label you like.



1 Press **TV/VIDEO** to select the desired input source.

2 Press **MENU** and the MENU screen displays.

3 Press ◀/▶ to select “Setup”.

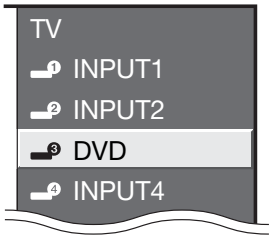
4 Press ▲/▼ to select “Input Label”, and then press **ENTER**.

5 Press ▲/▼ to select characters and ◀/▶ to move to the desired digit to label the input source.

- When you want to change the input label that you have already assigned to the default name, press ◀/▶ to move to “CLEAR” on the “Input Label” screen, and then press **ENTER**.

6 Repeat the above until the name is fully spelt out, and then press **MENU**.

- The name can be 6 characters or less.
- When you want to set an input source name of less than 6 characters, press **MENU** to exit from the labelling menu.



(Example)

NOTE

- You cannot change labels if the input source is TV.

Image position

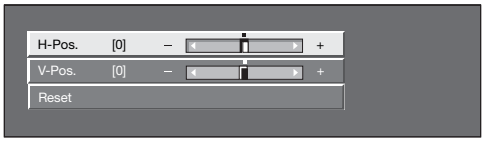
For adjusting a picture's horizontal and vertical position.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Position”, and then press **ENTER**.

4 Press ▲/▼ to select “H-Pos.” or “V-Pos.”.



5 Press ◀/▶ to adjust the item to your desired position.

Selected item	Description
H-Pos.	Centres the image by moving it to the left or right.
V-Pos.	Centres the image by moving it up or down.

NOTE

- For resetting all adjustment items to the factory preset values, press ▲/▼ to select “Reset”, and then press **ENTER**.
- **Adjustments are stored separately according to input source.**
- Images may not be displayed properly depending on the settings and/or input signals.

Wide Screen Signalling (WSS)

WSS allows a television to switch automatically among the different screen formats.

1. Press **MENU** and the MENU screen displays.
2. Press ◀/▶ to select “Setup”.
3. Press ▲/▼ to select “WSS”, and then press **ENTER**.
4. Press ▲/▼ to select “On” or “Off”, and then press **ENTER**.

NOTE

- Try to set WIDE mode if an image does not switch to the correct screen format. When the broadcast signal contains no WSS information, the function will not work even if enabled.

Picture aspect ratio

The WSS signal has 4:3 auto-switching that allows you to select between Normal and Panorama.

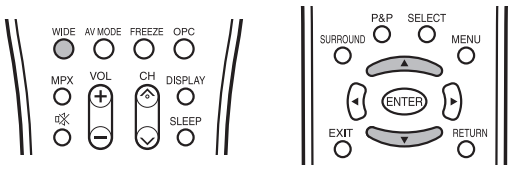
1. Press **MENU** and the MENU screen displays.
2. Press ◀/▶ to select “Setup”.
3. Press ▲/▼ to select “4:3 Mode”, and then press **ENTER**.
4. Press ▲/▼ to select “Panorama” or “Normal”, and then press **ENTER**.

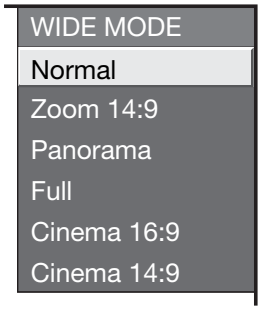
WSS signal 4:3 screen

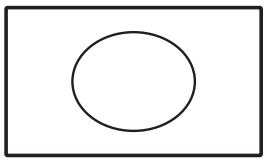
4:3 mode “Panorama”

4:3 mode “Normal”

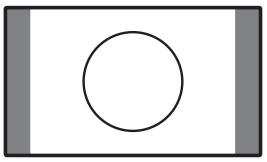
Selected item	Description
Panorama	Wide image without side bars
Normal	Normal range keeping 4:3 or 16:9 aspect ratio







4:3 Mode set to “Panorama”



4:3 Mode set to “Normal”

WIDE mode (for TV/AV input mode)

Manual Selection

1 Press **WIDE**.

- The WIDE MODE menu displays.
- The menu lists the wide mode options selectable for the type of video signal currently received.

2 Press **WIDE** or ▲/▼ while the WIDE MODE menu displays on the screen.

- As you toggle down the options, each is immediately reflected on the TV.

Auto Selection

If you set “WSS” and “4:3 Mode” in the Setup menu on page 29, the optimum WIDE mode is automatically chosen for every broadcast containing the WSS information.

“WSS” menu

To enable Auto Selection, set “WSS” in the Setup menu to “On”. (See page 29.)

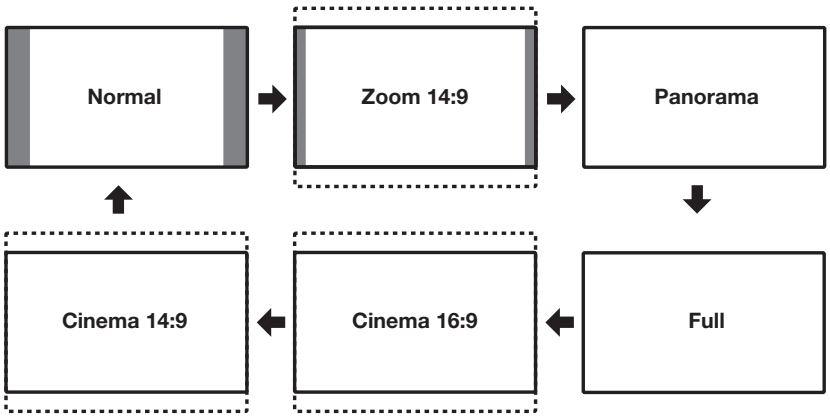
“4:3 Mode” menu

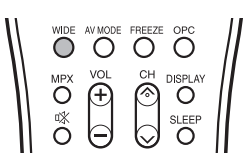
To set the type of the wide screen, select “Panorama” or “Normal” in the 4:3 Mode menu. (See page 29.)

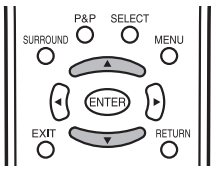
NOTE

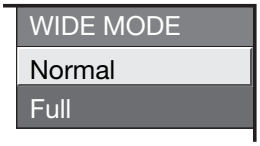
- If the broadcast signal contains no WSS information, Auto Selection will not function even when the WSS option is enabled.

Selected item	Description
Normal	For 4:3 “standard” pictures. A side bar appears on each side.
Zoom 14:9	For 14:9 letterbox pictures. A thin side bar appears on each side, and you may also see bars on the top and bottom with some programmes.
Panorama	In this mode the picture is progressively stretched toward each side of the screen.
Full	For 16:9 squeeze pictures.
Cinema 16:9	For 16:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.
Cinema 14:9	For 14:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.









WIDE mode (for PC input mode)

You can select the screen size.

NOTE

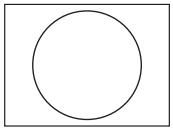
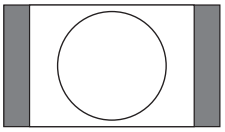
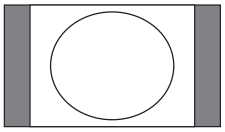
- Connect the PC before making adjustments. (See page 45.)
- Selectable screen size may vary with input signal type.

1 Press **WIDE**.
- The WIDE MODE menu displays.

2 Press **WIDE** or ▲/▼ to select a desired item on the menu.

EXAMPLE

Screen size images.

Input Signal	Normal	Full
 1024×768 1280×768 1360×768	 Keeps the original aspect ratio in a full screen display.	 An image fully fills the screen.

Language setting for on-screen display

You can also select a language from setup menu. Select from among 3 languages: English, Chinese and Arabic.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Language”, and then press **ENTER**.

4 Press ▲/▼ to select the desired language listed on the screen, and then press **ENTER**.

Audio Only

When listening to music from a music programme, you can set the display off and enjoy audio only.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “Audio Only”, and then press **ENTER**.

4 Press ▲/▼ to select “On”, and then press **ENTER**.

Selected item	Description
On	Audio is output without screen image.
Off	Both screen images and audio are output.

NOTE

- When you make operations that change the picture on the TV such as by changing the input source, the Audio Only function is set to “Off”.

DNR (Digital Noise Reduction)

Produces a clearer video image.

1 Press **MENU** and the MENU screen displays.

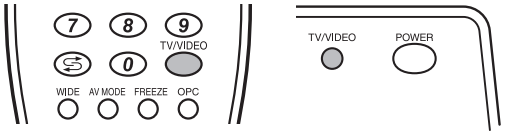
2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “DNR”, and then press **ENTER**.

4 Press ▲/▼ to select the desired level, and then press **ENTER**.

Input Select

Selecting input source
Can use for selecting the input source.



1 Press **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the TV.

2 Press **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the TV to select the input source.

- An image from the selected source automatically displays.
- You can also select the input source by pressing ▲/▼.

Selecting input signal type
For setting the signal type of external equipment.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “Input Select”, and then press **ENTER**.

4 Press ▲/▼ to select an input source among “Input1”, “Input2” and “Input3”, and then press **ENTER**.

5 Press ▲/▼ to select the desired level, and then press **ENTER**.

Input source	Selectable item
Input 1	Auto, Component, Video
Input 2	Auto, Component, Video
Input 3	Auto, S-Video, Video

NOTE

- **If no (colour) image displays, try to change the other signal type.**
- Check the operation manual of the external equipment for the signal type.
- When the signal type is set to “Auto”, the input terminal where cable is connected is automatically selected.
- When the signal type is set to “Auto” and multiple video signal cables are connected, the signal type is selected in the following prioritised order:
  Input 1/Input 2: Component→ Video
  Input 3: S-Video→ Video

Blue Screen

Automatically turns the screen blue if no broadcast signal is received.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “Blue Screen”, and then press **ENTER**.

4 Press ▲/▼ to select “On”, and then press **ENTER**.

Colour system setting

You can change the colour system to one that is compatible with the image on the screen.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “Colour System”, and then press **ENTER**.

4 Press ▲/▼ to select a compatible video signal system of your equipment, and then press **ENTER**.

NOTE

- Factory preset value is “AUTO”.
- If “AUTO” is selected, colour system for each channel is automatically set. If an image does not display clearly, select another colour system (e.g. PAL, NTSC 4.43).

Power Control

Power Control setting allows you to save energy.

Power Control for AV source

No Signal Off

When set to “Enable”, the power will automatically shut down if no signal inputs for 15 minutes.

1. Press **MENU** and the MENU screen displays.
2. Press ◀/▶ to select “Option”.
   - Power control menu displays.
3. Press ▲/▼ to select “Power Control”, and then press **ENTER**.
4. Press ▲/▼ to select “No Signal Off”, and then press **ENTER**.
5. Press ▲/▼ to select “Enable”, and then press **ENTER**.
   - Five minutes before the power shuts down, remaining time displays every minute.

NOTE

- “Disable” is factory preset value.
- When a TV programme finishes, and the TV receives signal input, this function may not operate.

No Operation Off

When set to “Enable”, the power will automatically shut down if there is no operation for 3 hours.

1. Press **MENU** and the MENU screen displays.
2. Press ◀/▶ to select “Option”.
   - Power control menu displays.
3. Press ▲/▼ to select “Power Control”, and then press **ENTER**.
4. Press ▲/▼ to select “No Operation Off”, and then press **ENTER**.
5. Press ▲/▼ to select “Enable”, and then press **ENTER**.
   - Five minutes before the power shuts down, remaining time displays every minute.

NOTE

- “Disable” is factory preset value.

Power Control for PC source

Power Management

When set, the power will automatically shut down if no signal is input for a certain time.

1. Press **MENU** and the MENU screen displays.
2. Press ◀/▶ to select “Option”.
   - Power control menu displays.
3. Press ▲/▼ to select “Power Control”, and then press **ENTER**.
4. Press ▲/▼ to select “Power Management”, and then press **ENTER**.
5. Press ▲/▼ to select “Mode1” or “Mode2”, and then press **ENTER**.

Selected item	Description
Off	• No power management • Factory preset value.
Mode1	• If no signal inputs for approximately 8 minutes, the power shuts down. • Even if you start using the PC and the signal inputs again, the TV stays off. • The TV turns on again by pressing **POWER**. (See page 13.)
Mode2	• If no signal inputs for approximately 8 seconds, the power shuts down. • When you start using the PC and the signal inputs again, the TV turns on. • The TV turns on again by pressing **POWER**. (See page 13.)

NOTE

- If you turn off the power by disconnecting AC cord when setting “Mode2” in power management, the TV may not function properly after turning the power on again. In such case, press **POWER** on the remote control unit.
- Pressing **POWER** on the display will have the same result.

HDMI Setup

HDMI (High-Definition Multimedia Interface) terminal selection.

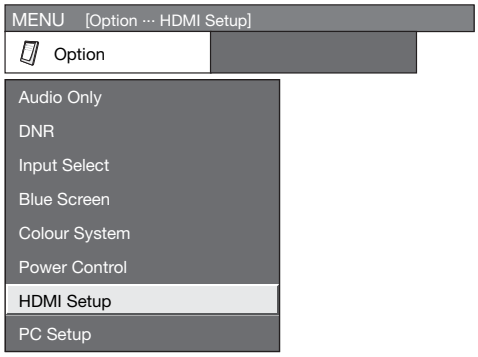
1 To watch an HDMI equipment image, select “INPUT4” or “INPUT5” using **TV/VIDEO** on the remote control unit or on the TV.

2 Press **MENU** and the MENU screen displays.

3 Press ◀/▶ to select “Option”.

4 Press ▲/▼ to select “HDMI Setup”, and then press **ENTER**.

- The HDMI Setup can be selected only when “INPUT4” or “INPUT5” is selected.



5 Press ▲/▼ to select the desired item or setting, and then press **ENTER**.

HDMI Setup items	Selectable items	Description
Signal Type	RGB/ YCbCr4:4:4/ YCbCr4:2:2	Select the video signal type from the HDMI terminal. User settings for this item are normally in effect only when the TV is connected with a DVI-HDMI conversion cable. When connected to an HDMI device, the TV automatically detects the “Signal Type” and ignores user settings before operating.
Colour Matrix	Auto/ITU601/ ITU709	Select the video colour matrix type when a YCbCr signal is input. Select the YCbCr colour system when a YCbCr signal is input. When an RGB signal is input, the settings for this item are ignored. “Auto” should normally be selected.
Auto View	Enable/Disable	Set whether or not to use WIDE MODE based on signal recognition, including an HDMI signal.
Audio Select	Digital/Analogue	Select “Digital” for audio signal via the HDMI terminal. Select “Analogue” for audio signal via the AUDIO jack. (selectable only when using INPUT4 of the two HDMI terminals.)

NOTE

- Refer to your external equipment operation manual for the signal type.
- When connecting a DVI-HDMI conversion adaptor/cable to the HDMI terminals, the image may not come in clearly.

PC Setup

Input Signal (PC input mode only)

- Some input signals may have to be registered manually to display properly.
- The input signals (resolutions) in the list below are not distinguishable when received. In such case, you have to set the correct signal manually. After setting once, it will display when the same signal (resolution) is input again.

1024×768	1280×768	1360×768

NOTE

- You can only select the “Input Signal” on the Setup menu when receiving one of the 3 input signals listed above.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “PC Setup”, and then press **ENTER**.

4 Press ▲/▼ to select “Input Signal” and then press **ENTER**.

5 Press ▲/▼ to select the desired input signal on the display.

(Example)

Auto Sync. adjustment (PC input mode only)

For automatically adjusting the PC image.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “PC Setup”, and then press **ENTER**.

4 Press ▲/▼ to select “Auto Sync.”, and then press **ENTER**.

5 Press ▲/▼ to select “Yes”, and then press **ENTER**.
- Auto Sync. starts.

NOTE

- Auto Sync. is likely to succeed when an input PC image has wide vertical stripes (ex. pattern with high contrast stripes, or cross-hatched).
  It may fail when an input PC image is solid (low contrast).
- Be sure to connect the PC to the TV and switch it on before starting Auto Sync.

Fine Sync. adjustment (PC input mode only)

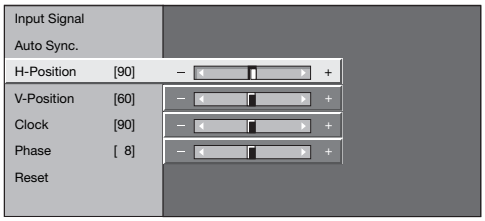
Ordinarily you can easily adjust the picture as necessary to change image position using Auto Sync. In some cases, however, manual adjustment is needed to optimise the image.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “PC Setup”, and then press **ENTER**.

4 Press ▲/▼ to select a specific adjustment item among “H-Position”, “V-Position”, “Clock” and “Phase”.



Selected item	Description
H-Position	Centres the image by moving it to the left or right.
V-Position	Centres the image by moving it to the up or down.
Clock	Adjusts when the image flickers with vertical stripes.
Phase	Adjusts when characters have low contrast or when the image flickers.

5 Press ◀/▶ to adjust the item to your desired position.

NOTE

- For resetting all adjustment items to factory preset values, press ▲/▼ to select “Reset”, and then press **ENTER**.
- Images may not be displayed properly depending on the settings and/or input signals.

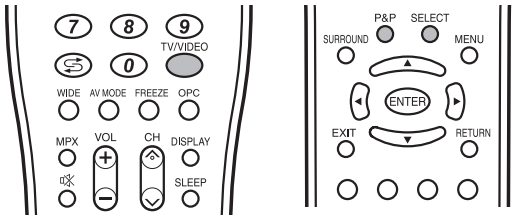
Useful features

Dual screen functions

Allows you to display two pictures on the screen at one time.

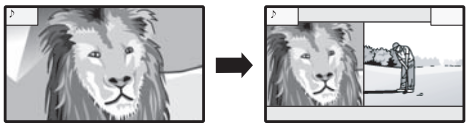
Dual screen

You can display two pictures except when inputting from the RS-232C or PC INPUT terminal.



1 Press **P&P**.

- Dual screen displays and a selected input source image displays.



2 Press **SELECT** to set either screen to be active.

- "♪" displays on the active screen, which has sound output.

3 Press **TV/VIDEO** to select another input source on the active screen.

- A selected image displays.

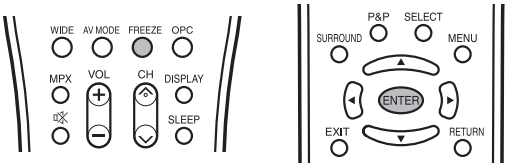
4 Press **P&P** to exit dual screen.

NOTE

- This function does not work under the following input conditions:
  ① Two pictures from the same source (e.g. INPUT 1 and INPUT 1),
  ② Two pictures with different vertical frequency (e.g. PAL and PAL-60, PAL (50 Hz) and NTSC (60 Hz)),
- When you press **P&P**, the current input is moved to the left side screen display, and the other input appears on the right side screen display.
  When you cannot acquire dual screen capability, perform the operation below.
  — Select another input whose vertical frequency is same as one of the current inputs (e.g. PAL and PAL).
- When this function is not available, "No dual screen display available." will display.

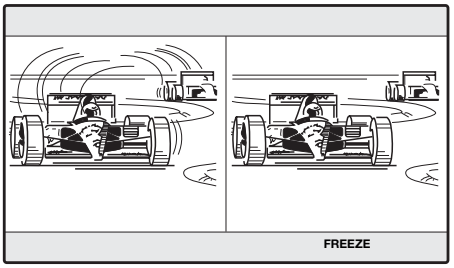
Picture and still image

You can freeze a motion picture on the Display.



1 Press **FREEZE**.

- A moving image displays on the left screen and a still image displays on the right screen. The still image is one frame captured from a moving image at the moment you press **FREEZE**.



(Example)

2 Reshoot the still image by pressing **ENTER**.

- Each time you press **ENTER**, the image on the right screen updates.

3 Press **RETURN** to exit still image.

NOTE

- When this function is not available, "No still image available." will display.
- The still image automatically goes out after 30 minutes.

Teletext language setting

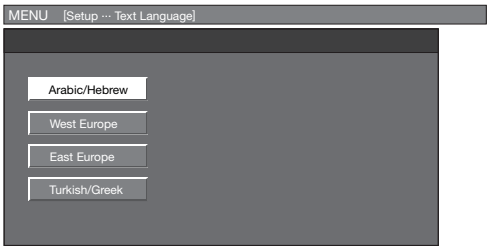
If Teletext information does not display correctly, perform the setting procedure below.
Select from among 4 kinds of language tables: West Europe, East Europe, Turkish/Greek, Arabic/Hebrew. Each table is compatible with the Teletext languages listed below.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Text Language”, and then press **ENTER**.

4 Press ▲/▼ to select receivable teletext broadcasting language in your country, and then press **ENTER**.



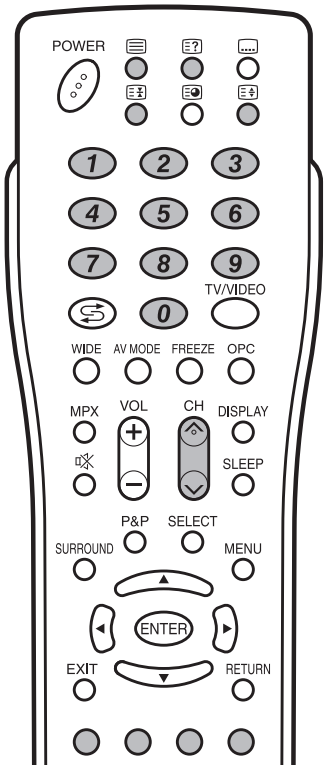
NOTE

- Teletext can display only when it is sent by a network. Not used to convert between languages.

Teletext function

What is Teletext?
Teletext broadcasts pages of information and entertainment to specially equipped television sets. Your TV receives Teletext signals broadcast by a TV network, and decodes them into graphical format for viewing. News, weather reports, sports information, stock exchange prices and programme previews are among the many services available.

Teletext mode
Teletext is turned on/off with ☰ on the remote control unit. You can operate your TV in Teletext mode directly by inputting commands with the remote control unit.

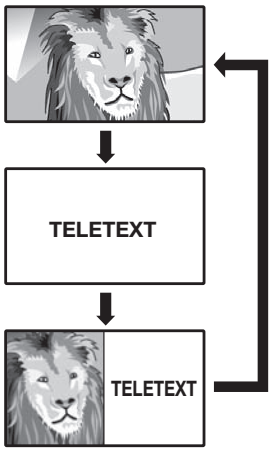


Turning on and off Teletext

1 Select a TV channel or external input source providing the Teletext programme.

2 Press ☰ to display the Teletext.

3 Press ☰ again to display the Teletext on the right screen and normal image on the left screen.
- Each time you press ☰, the screen switches as shown upper right.
- If you select a programme with no Teletext signal, "No Teletext available." is displayed.

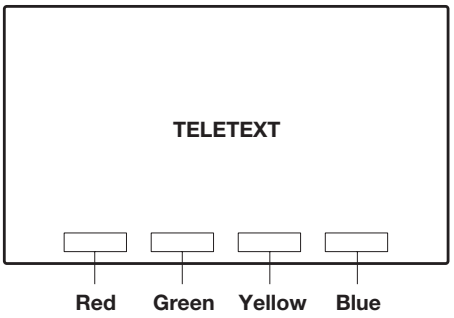


When viewing the Teletext information
- Press **CH∧** to increase the page number.
- Press **CH∨** to decrease the page number.

NOTE
- When you turn TELETEXT on and change a Teletext page right after changing channels, the relevant page may not be displayed until the TV finishes reading all the Teletext information.

Button functions

Colour (Red/Green/Yellow/Blue):
You can select a group or block of pages displayed in the coloured brackets at the bottom of the screen by pressing the corresponding **Colour (Red/Green/Yellow/Blue)** on the remote control unit.



0 — 9:
Directly select any page from 100 to 899 by using **0 — 9**.

(Top/Bottom/Full):
Each time you press , the TELETEXT image switches as shown below.

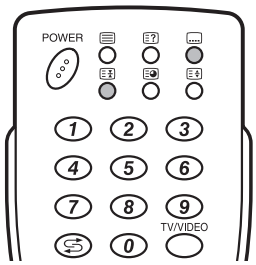
Full (Displays in full screen)
↓
Top (Displays in the upper half of the screen)
↓
Bottom (Displays in the lower half of the screen)

(Reveal hidden for TELETEXT):
To reveal hidden information such as an answer to a quiz, press .
- Press again to hide the information.

(Hold):
To stop updating Teletext pages automatically, press .
- Press again to release the hold mode.

Displaying Subtitle

You can display several subtitles as they are transmitted.



1 Press to display the subtitle.

- Subtitle is updated by information sent by the broadcasting station.
- To stop updating subtitle automatically, press .

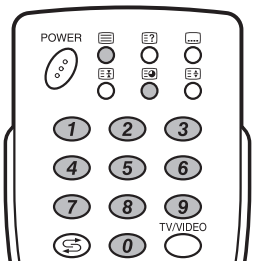
2 Press to exit the subtitle screen.

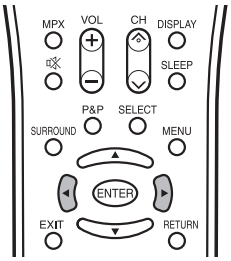
NOTE

- Subtitle will not be displayed when the service does not contain the subtitle information.

Displaying Subpages

You can display several subpages as they are transmitted.

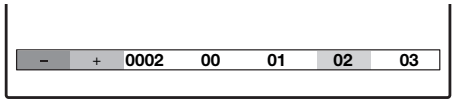




1 Press to display Teletext.

2 Press to display the subpage as shown below.

Subpage screen



3 Select the desired subpage by using ◀/▶.

- **0 — 9** directly selects the desired subpage.

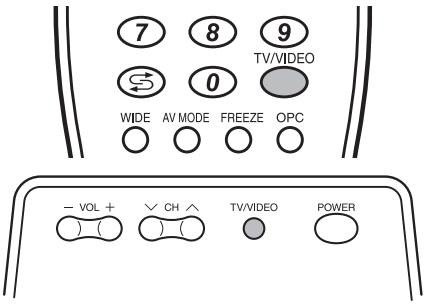
4 Press to exit the subpage screen.

Using external equipment

You can connect many types of external equipment to your TV, like a VCR, DVD player, HDTV tuner, game console and camcorder. To view external source images, select the input source from **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the TV.

Displaying an external equipment image

Explanation here is for the setting when connecting DVD to INPUT1 terminal.



CAUTION

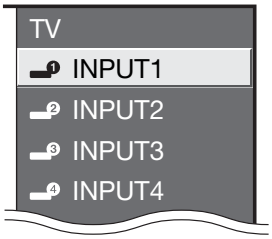
- To protect all equipment, always turn off the TV before connecting to a VCR, DVD player, HDTV tuner, game console, camcorder or other external equipment.

NOTE

- See pages 42 to 45 for external equipment connection.
- Please refer to the relevant operation manual (VCR, DVD player, etc.) carefully before making connections.
- Each time **TV/VIDEO** is pressed, the input source toggles.
- If the image does not come in clearly, you may need to change the input signal type setting on the "Input Select" menu.
- Refer to your external equipment operation manual for the signal type.

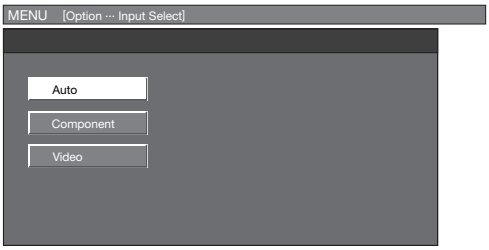
Displaying a DVD image (Example)

1 To watch a DVD image, select "INPUT1" using **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the TV.



2 Select the desired signal type on "Input Select" in the "Option" menu. (See page 33.)

For INPUT1 signal

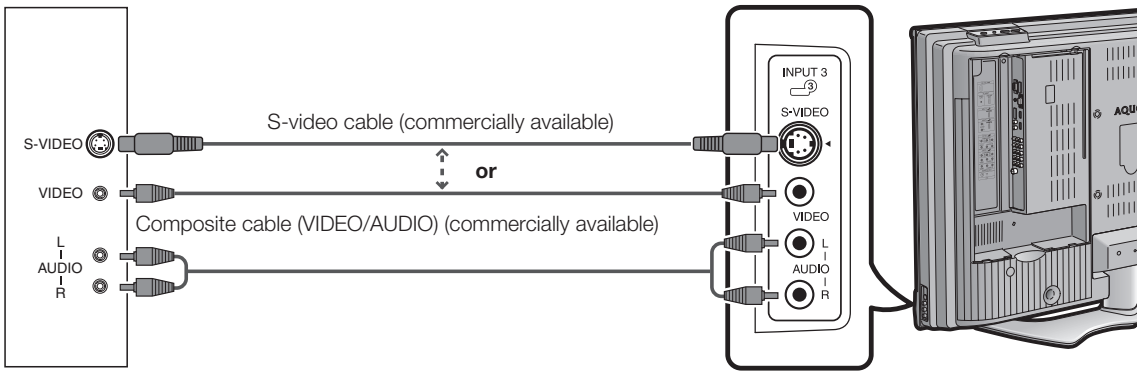


The setting is stored and can be selected.

Connecting a VCR

You can use the INPUT 3 terminal when connecting a VCR and other audiovisual equipment.

To watch an image from this input terminal, you need to select the input source (see page 42) and the input signal type (see page 33).



VCR

Connecting a DVD player

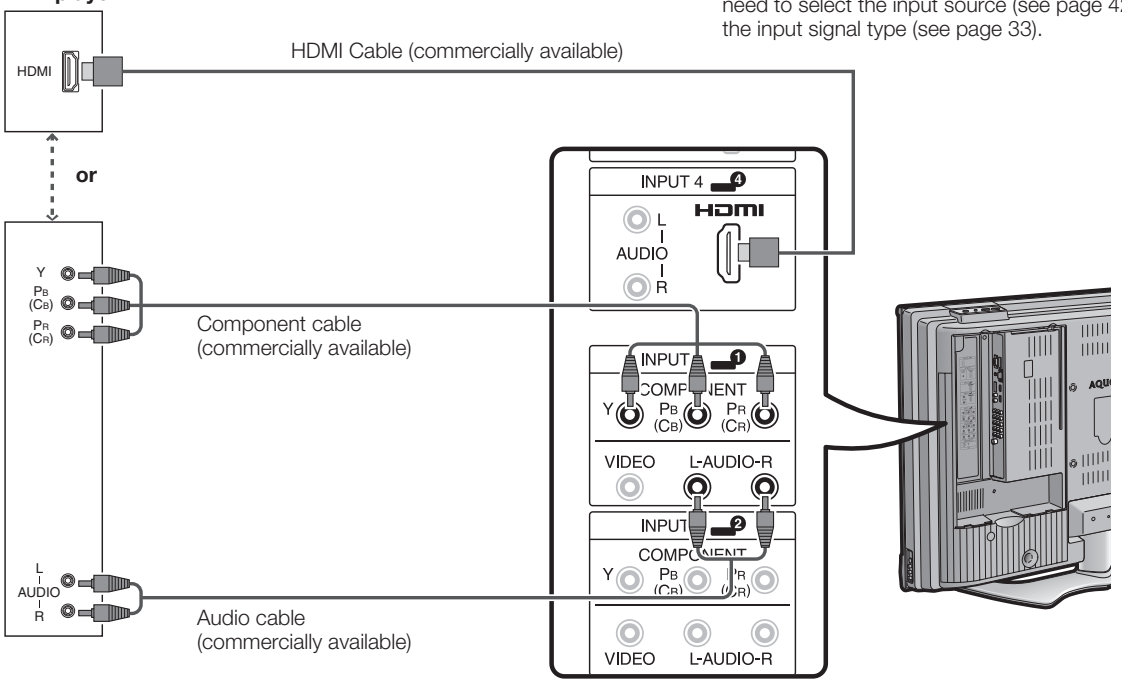
You can use the INPUT 1, INPUT 4 (HDMI) or INPUT 5 (HDMI) terminal when connecting to a DVD player and other audiovisual equipment.

NOTE

- When using a DVI-HDMI conversion adaptor, input the Audio Signal from the AUDIO terminal of INPUT 4.

DVD player

To watch an image from this input terminal, you need to select the input source (see page 42) and the input signal type (see page 33).



When using component cable, select “Component” for “Input Select” in the menu.

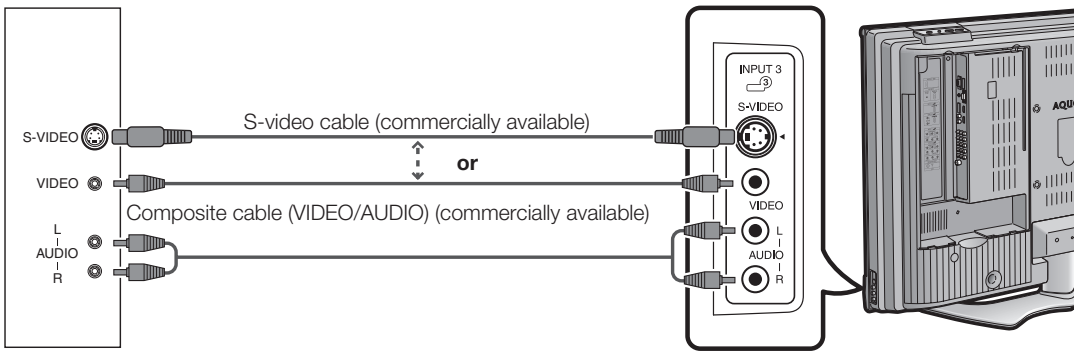
Connecting a game console or camcorder

A game console, camcorder and some other audiovisual equipment are conveniently connected using the INPUT 3 terminals.

NOTE

- When the S-video terminal and video terminals are both used, the S-video input takes priority over the video terminals only when “Auto” is selected in “Input Select” setting.
- You can also connect the game console to INPUT 1 or 2 terminals to enjoy clearer picture.

To watch an image from this input terminal, you need to select the input source (see page 42) and the input signal type (see page 33).

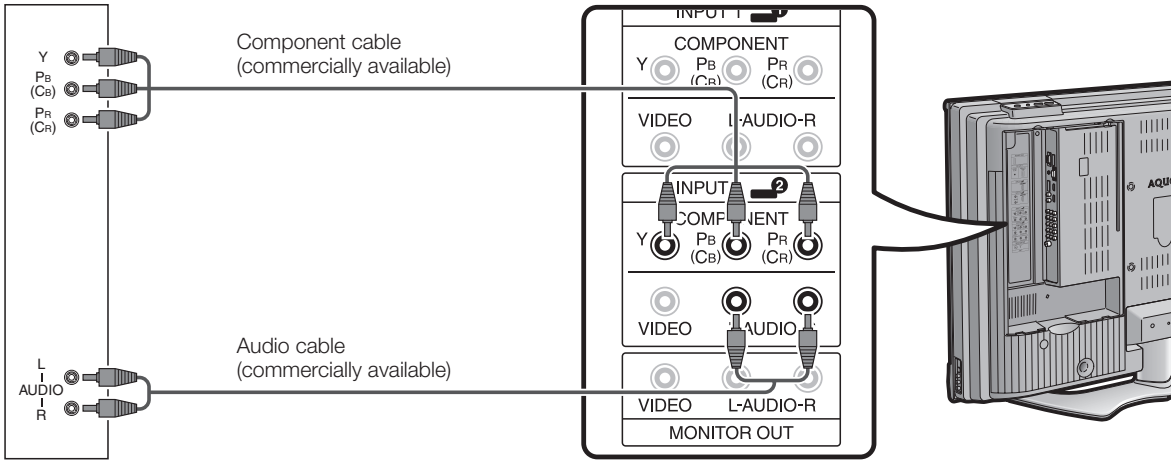


Game console/Camcorder

Connecting an HDTV tuner

You can use the INPUT1 or INPUT 2 terminal when connecting to an HDTV tuner and other audiovisual equipment.

To watch an image from this input terminal, you need to select the input source (see page 42) and the input signal type (see page 33).



HDTV tuner

When using component cable, select "Component" for "Input Select" in the menu.

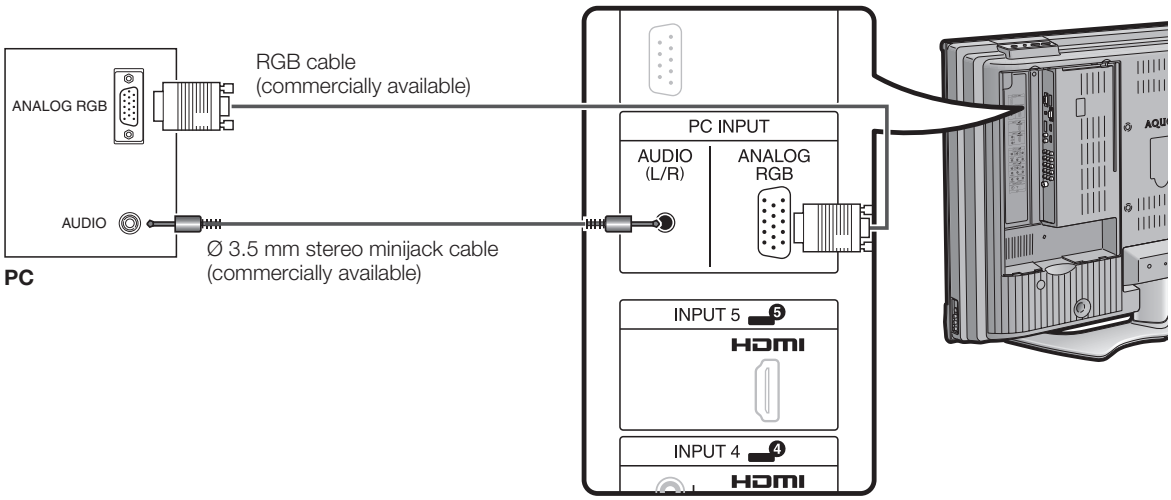
Viewing an image from a PC

Connecting a PC

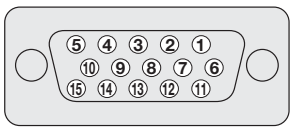
Use the PC terminals to connect a PC.

NOTE

- The PC INPUT terminals are DDC1/2B-compatible.
- Refer to page 46 for a list of PC signals compatible with the TV.



Signal names for 15-pin mini D-sub connector



Pin No.	Signal name	Pin No.	Signal name	Pin No.	Signal name
①	R	⑥	GND (Ground)	⑪	Not connected
②	G	⑦	GND (Ground)	⑫	SDA
③	B	⑧	GND (Ground)	⑬	HD
④	Not connected	⑨	+5V	⑭	VD
⑤	CSYNC	⑩	GND (Ground)	⑮	SCL

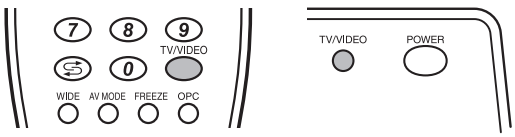
NOTE

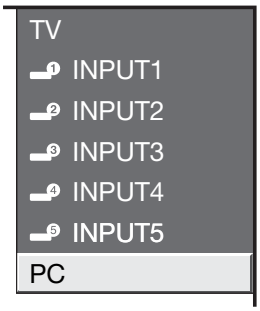
- Macintosh adaptor may be required for use for some Macintosh computers.

Displaying an image from a PC

To view an image from a PC, select “PC” using **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the TV.

When connecting to a PC, the correct input signal type is automatically detected. (See page 36.)





NOTE

- Each time **TV/VIDEO** is pressed, the input source toggles.

Appendix

Troubleshooting

Problem	Possible Solution
• No power.	• Check if you pressed **POWER** on the remote control unit. (See page 13.) If the indicator on the TV lights up red, press **POWER**. • Is the AC cord disconnected? (See page 6.) • Has the power been turned on? (See page 13.)
• Unit cannot be operated.	• External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the unit after first turning the power off the TV or unplugging the AC cord and re-plugging it in after 1 or 2 minutes.
• Remote control unit does not operate.	• Are batteries inserted with polarity (+, −) aligned? (See page 5.) • Are batteries worn out? (Replace with new batteries.) • Are you using it under strong or fluorescent lighting? • Is a fluorescent light illuminated to remote control sensor?
• Picture is cut off.	• Is the image position correct? (See page 28.) • Are screen mode adjustments such as picture size made correctly? (See pages 29 to 31.)
• Strange colour, light colour, or dark, or colour misalignment.	• Adjust the picture tone. (See pages 23 to 25 and 33.) • Is the room too bright? The picture may look dark in a room that is too bright. • Check the colour system setting. (See pages 19 and 34.) • Check the input signal setting. (See page 33.)
• Power is suddenly turned off.	• The unit's internal temperature has increased. Remove any objects blocking vent or clean. • Check the power control setting. (See page 35.) • Is sleep timer set? (See page 15.)
• No picture.	• Is connection to other equipment correct? (See pages 42 to 45) • Has input signal setup been done correctly after connection? (See page 33.) • Is the correct input selected? (See page 33.) • Is picture adjustment correct? (See pages 23 to 25.) • Is the antenna connected properly? (See page 8.) • Is “On” selected in “Audio Only”? (See page 33.)
• No sound.	• Is the volume too low? (See page 15.) • Make sure that headphones are not connected. (See page 10.)

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.
  Storage temperature: −20°C to +60°C.

PC compatibility chart

Resolution		Horizontal Frequency	Vertical Frequency	VESA Standard
VGA	640 × 480	31.5 kHz	60 Hz	
	640 × 480	37.9 kHz	72 Hz	✓
	640 × 480	37.5 kHz	75 Hz	✓
	640 × 480	43.3 kHz	85 Hz	✓
SVGA	800 × 600	35.1 kHz	56 Hz	✓
	800 × 600	37.9 kHz	60 Hz	✓
	800 × 600	48.1 kHz	72 Hz	✓
	800 × 600	46.9 kHz	75 Hz	✓
	800 × 600	53.7 kHz	85 Hz	✓

Resolution		Horizontal Frequency	Vertical Frequency	VESA Standard
XGA	1024 × 768	48.4 kHz	60 Hz	✓
	1024 × 768	56.5 kHz	70 Hz	✓
	1024 × 768	60.0 kHz	75 Hz	✓
WXGA	1280 × 768	47.8 kHz	60 Hz	✓
	1360 × 768	47.7 kHz	60 Hz	✓

RS-232C port specifications

PC Control of the TV

- When a program is set, the TV can be controlled from the PC using the RS-232C terminal. The input signal (PC/video) can be selected, the volume can be adjusted and various other adjustments and settings can be made, enabling automatic programmed playing.
- Attach an RS-232C cable cross-type (commercially available) to the supplied Din/D-sub RS-232C for the connections.

NOTE

- This operation system should be used by a person who is accustomed to using PCs.

Communication conditions

Set the RS-232C communications settings on the PC to match the communications conditions of the TV. The communications settings of the TV are as follows:

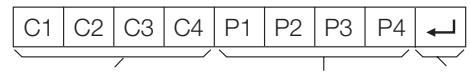
Baud rate:	9,600 bps
Data length:	8 bits
Parity bit:	None
Stop bit:	1 bit
Flow control:	None

Communication procedure

Send the control commands from the PC via the RS-232C connector.
The TV operates according to the received command and sends a response message to the PC.
Do not send multiple commands at the same time. Wait until the PC receives the OK response before sending the next command.

Command format

Eight ASCII codes + CR



Command 4-digits: Command. The text of four characters.
Parameter 4-digits: Parameter 0 — 9, space, ?

Command 4-digits Parameter 4-digits Return code

Parameter

Input the parameter values, aligning left, and fill with space(s) for the remainder. (Be sure that four values are input for the parameter.)
When the input parameter is not correct, “ERR” returns. (Refer to “Response code format”.)

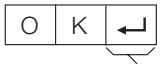
0			
0	0	0	9
–	3	0	
1	0	0	
0	0	5	5

When “?” is input for some commands, the present setting value responds.

?			
?	?	?	?

Response code format

Normal response



Problem response (communication error or incorrect command)

Commands

- Commands not indicated here are not guaranteed to operate.

CONTROL ITEM	COMMAND	PARAMETER	CONTROL CONTENTS
POWER SETTING	PORWR	0___	POWER OFF (STANDBY)
INPUT SELECTION A	ITGD_	____	INPUT SWITCHING (TOGGLE)
	IAVD_	*___	INPUT1—6 (INPUT6=PC) 0: TV
CHANNEL	DCCH_	**__	TV DIRECT CHANNEL (1—99)
	CHUP_	____	CHANNEL UP
	CHDW_	____	CHANNEL DOWN
INPUT SELECTION B	INP1_	0___	INPUT1 (AUTO)
	INP1_	1___	INPUT1 (COMPONENT)
	INP1_	3___	INPUT1 (VIDEO)
	INP2_	0___	INPUT2 (AUTO)
	INP2_	1___	INPUT2 (COMPONENT)
	INP2_	3___	INPUT2 (VIDEO)
	INP3_	0___	INPUT3 (AUTO)
	INP3_	2___	INPUT3 (S-VIDEO)
	INP3_	3___	INPUT3 (VIDEO)
VOLUME	VOLM_	**__	VOLUME (0—60)
POSITION	HPOS_	***_	H-POSITION (AV) (−10—10)
	HPOS_	***_	H-POSITION (PC) (0—180)
	VPOS_	***_	V-POSITION (AV) (−20—20)
	VPOS_	***_	V-POSITION (PC) (0—120)
	CLCK_	***_	CLOCK (0—180)
	PHSE_	***_	PHASE (0—15)

CONTROL ITEM	COMMAND	PARAMETER	CONTROL CONTENTS
WIDE MODE	WIDE_	0___	TOGGLE
	WIDE_	1___	NORMAL
	WIDE_	2___	ZOOM 14:9
	WIDE_	3___	PANORAMA
	WIDE_	4___	FULL
	WIDE_	5___	CINEMA 16:9
	WIDE_	6___	CINEMA 14:9
MUTE	MUTE_	0___	TOGGLE
	MUTE_	1___	ON
	MUTE_	2___	OFF
SURROUND	ACSU_	0___	SURROUND TOGGLE
	ACSU_	1___	SURROUND ON
	ACSU_	2___	SURROUND OFF
DUAL SCREEN	TWIN_	0___	DUAL SCREEN OFF
	TWIN_	1___	DUAL SCREEN ON
AUDIO CHANGE	ACHA_	____	TOGGLE
SLEEP TIMER	OFTM_	0___	OFF
	OFTM_	1___	SLEEP TIMER 30 MIN
	OFTM_	2___	SLEEP TIMER 1 HOUR
	OFTM_	3___	SLEEP TIMER 1 HOUR 30 MIN
	OFTM_	4___	SLEEP TIMER 2 HOUR
	OFTM_	5___	SLEEP TIMER 2 HOUR 30 MIN

NOTE

- If an underbar (_) appears in the parameter column, enter a space.
- If an asterisk (*) appears, enter a value in the range indicated in brackets under CONTROL CONTENTS.

Specifications

Item \ Model				LC-42BX5X
LCD panel				42″ (106 cm) Advanced Super View & BLACK TFT LCD
Number of dots				3,147,264 dots (1366 × 768 × 3 dots)
Video Colour System				PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60
TV Function	TV-Standard			PAL: B/G, D/K, I SECAM: B/G, D/K, K/K_1 NTSC: M
	Receiving Channel	VHF/UHF		44.25—863.25 MHz
		CATV		S1—S41ch (including Hyperband)
	TV-Tuning System			Auto Preset 99 ch
	STEREO/BILINGUAL			NICAM: B/G, I, D/K A2 stereo: B/G
Brightness				450 cd/m^2
Backlight life				60,000 hours (at Backlight Standard position)
Viewing angles				H : 176° V : 176°
Audio amplifier				10W × 2
Speakers				Ø 6.5 cm 4pcs
Terminals	Rear		ANTENNA IN	UHF/VHF 75 Ω DIN type
			INPUT 1	VIDEO in, AUDIO in, COMPONENT in (480I, 580I, 480P, 580P, 720P/60Hz, 1080I/50Hz, 1080I/60Hz)
			INPUT 2	VIDEO in, AUDIO in, COMPONENT in (480I, 580I, 480P, 580P, 720P/60Hz, 1080I/50Hz, 1080I/60Hz)
			INPUT 4	HDMI (HDMI input) (480P, 580P, 720P/50Hz, 720P/60Hz, 1080I/50Hz, 1080I/60Hz), AUDIO in
			INPUT 5	HDMI (HDMI input) (480P, 580P, 720P/50Hz, 720P/60Hz, 1080I/50Hz, 1080I/60Hz)
			PC INPUT	15 pin mini D-sub, AUDIO in (Ø 3.5mm jack)
			MONITOR OUTPUT	VIDEO out, AUDIO out
			RS-232C	9 pin D-sub male connector
	Side		INPUT 3	VIDEO in, AUDIO in, S-VIDEO in
	Front		Headphones	Ø 3.5mm jack (Audio output)
OSD language				English/Chinese/Arabic
Power Requirement				AC 110—240 V, 50/60 Hz
Power Consumption				225 W (0.8 W Standby) (Method IEC60107)
Weight			without stand	31.5 kg
			with stand	37.0 kg
Operating Temperature				0°C—40°C

- As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Optional accessories

The listed optional accessories are available for the LCD colour TV. Please purchase them at your nearest shop.

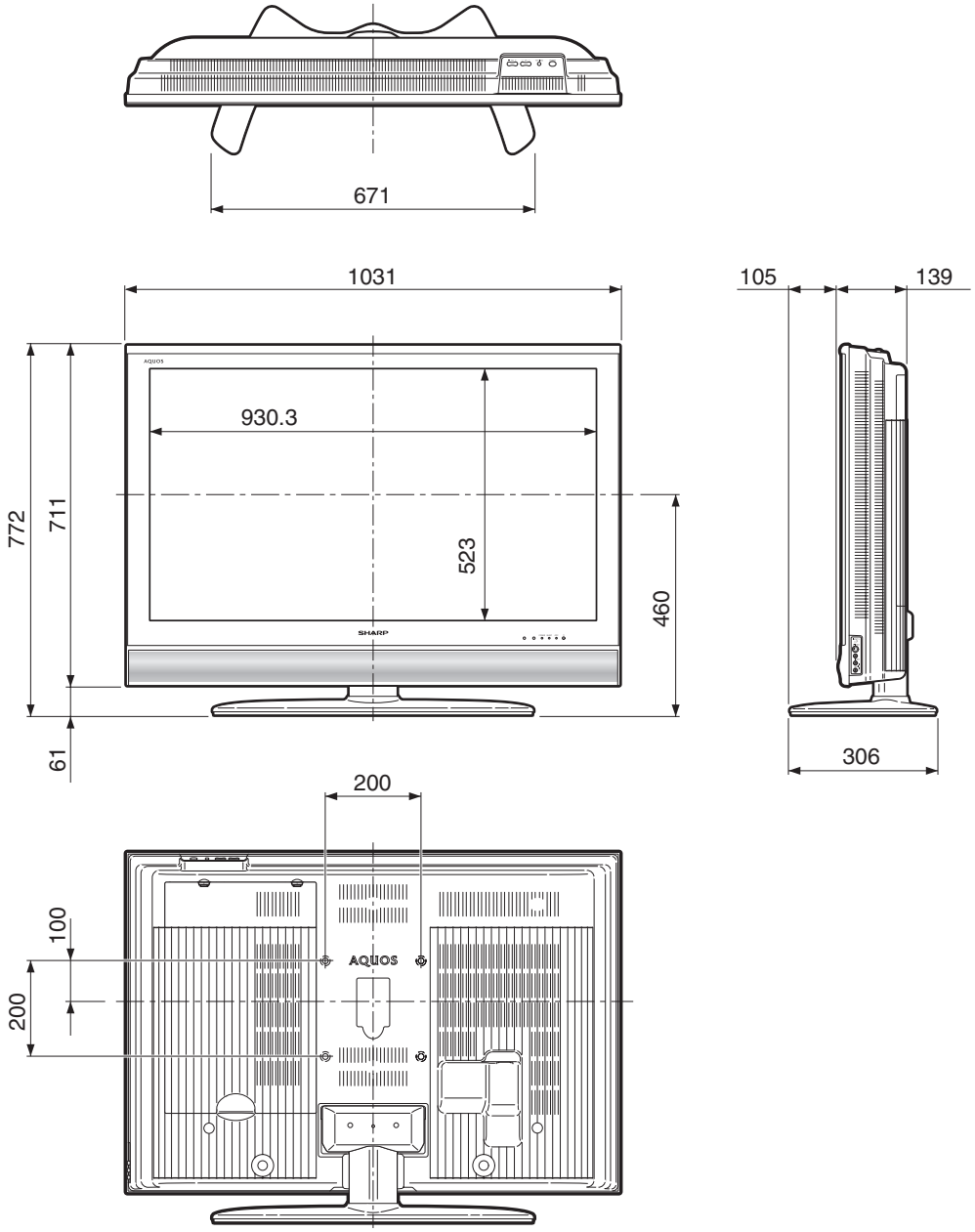
- Additional optional accessories may be available in the near future. When purchasing, please read the newest catalogue for compatibility and check the availability.

Part name	Model number
Wall mount bracket	AN-37AG2*
	AN-52AG1

* The adjustable TV angle is either 0° or 5° when using the AN-37AG2 wall mount bracket. (See page 9.)

Dimensional drawings

Unit: mm



Memo

Password

Memo

SHARP

FOR LOCATION ENQUIRIES WITHIN

AUSTRALIA

REGARDING YOUR LOCAL

SHARP APPROVED SERVICE CENTRE

VISIT OUR WEBSITE AT

www.sharp.net.au

OR CALL SHARP CUSTOMER CARE

1300 135 022

(LOCAL CALL COST APPLY WITHIN AUSTRALIA)

SHARP CORPORATION OF AUSTRALIA PTY LTD

SHARP

FOR LOCATION ENQUIRIES WITHIN

NEW ZEALAND

REGARDING YOUR LOCAL

SHARP APPROVED SERVICE CENTRE

VISIT OUR WEBSITE AT

www.sharp.net.nz

CONTACT YOUR SELLING DEALER/RETAILER

OR CALL

SHARP CUSTOMER SERVICES

TELEPHONE: 09 573 0111

FACSIMILE: 09 573 0113

SHARP CORPORATION OF NEW ZEALAND LIMITED

SPform019(JUNE 2004)

SHARP

WARRANTY

Consumer Electronic Products

Congratulations on Your Purchase!

This Sharp product is warranted against faults in materials and manufacture for a period of twelve (12) months from the date of original purchase.

If service is required during the warranty period, please contact your nearest Sharp Approved Service Centre. These repairs would be carried out at no charge to the owner, subject to the conditions specified herein.

The owner is responsible for any transportation and insurance costs if the product has to be returned for repair.

This warranty does not extend to accessories or defects or injuries caused by or resulting from causes not attributable to faulty parts or the manufacture of the product, including but not limited to, defect or injury caused by or resulting from misuse, abuse, neglect, accidental damage, improper voltage, liquid spillage, vermin infestation, software, or any alterations made to the product which are not authorised by Sharp.

Please retain your sales documentation, as this should be produced to validate a warranty claim.

This warranty is in addition to and in no way limits, varies or excludes any express and implied rights and remedies under any relevant legislation in the country of sale.

IMPORTANT
DO NOT RETURN THIS DOCUMENT TO SHARP

For your reference, please enter the particulars of your purchase below and retain, with your purchase documentation.

Model No. _____

Serial No. _____

Date of Purchase _____

Retailer _____

SHARP

SHARP CORPORATION OF AUSTRALIA PTY. LIMITED
ABN 40 003 039 405
1 Huntingwood Drive
Huntingwood NSW2148

SHARP CORPORATION OF NEW ZEALAND LIMITED
59 Hugo Johnston Drive
Penrose, Auckland

SPform030 (JUNE 2004)

IMPORTANT NOTICE: This warranty applies only to products sold in Australia & New Zealand

SHARP®

SHARP CORPORATION

PRINTED WITH SOY INK

Printed on post-consumer recycled paper.

Printed in Malaysia
TINS-C754WJZZⒶ
06P11-MA-NG